

A King of Upper Egypt Conquers the Delta and Unites the Two Kingdoms

A BOUT 3000 B. C. the long war between the Two Kingdoms, or, as the Egyptians called them, "the Two Lands," was brought to an abrupt and permanent end. An Upper Egyptian king, whose official name as the earthly representative of the god Horus was *Na'r*, finally led the armies of the federated nomes of the south to a series of decisive victories over the north.

He invaded and subdued the whole of the Delta, and proclaimed himself "King of Upper and Lower Egypt," uniting the two parts of his country under one central rule and founding the long line of its prehistoric kings.

It is highly probable that this *Na'r*, whose personal name is unknown, is Egypt's great legendary hero, King Menes the Thinite, reputed founder of the 1st Dynasty.

In our plate we see *Na'r* and his Upper Egyptian army, already near the end of their successful campaign, routing in battle the hosts of the *Wa'-shi*, a west Delta folk, apparently of considerable importance. The right of dispatching the wounded enemy chief has been reserved for the king himself, and his heavy mace, with its alabaster head and gold-plated handle, is about to descend on the skull of the helpless man.

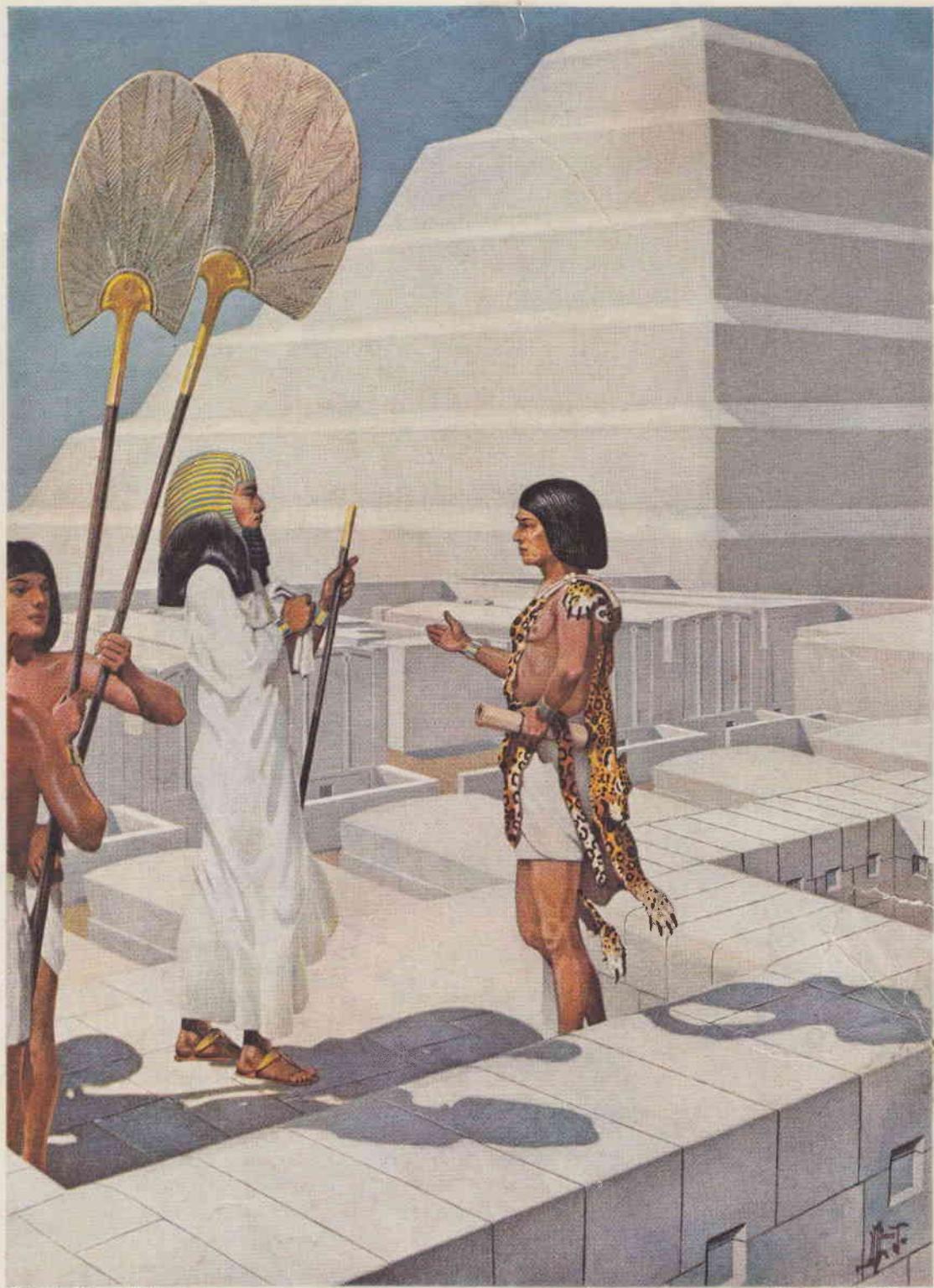
Na'r's short linen garment is girdled at the waist by an elaborate beadwork belt, supporting a bead sporran, each

pendant of which is topped by the gold cow head of the goddess *Hat-Hor*. From the back of the belt hangs an animal's tail, from now on one of the regular attributes of Egyptian kingship. *Na'r* wears on his head the tall, white, helmet-like crown of Upper Egypt, which he is soon to unite with its counterpart, the red, wicker-work crown of Lower Egypt.

On the king's left is his vizier, or prime minister, clad in a panther skin, and behind him stands his orderly with his sandals and oil jar.

Outlined against the sky, above the companies of archers and spearmen, appear the standards of the more important nomes of Upper Egypt, among which we may recognize the hawks of Hierakonpolis and Idfu and the wolf of Asyût.

The more effectively to govern his newly subjugated northern domain King *Na'r* Menes moved his capital and residence from the south to a site a few miles above the apex of the Delta. There, according to ancient tradition, he founded the great city of "White Wall," more familiar to us under its Greek name, "Memphis." The hoary antiquity of the city of Memphis has recently been attested by the discovery nearby of a royal cemetery dating from the First Dynasty and containing, among others, the tomb of *Na'r*'s immediate successor, the Horus 'Aha.



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Painting by H. M. Herget

"It Will Be Thy Counsel That Causeth the Work to Be Accomplished . . . My Majesty Desired"

King Djoser and his architect, the great I-em-hotep, survey the royal pyramid at Sakkâreh (Saqqâra) from the east wall of its enclosure. (IIIrd Dynasty, reign of Djoser, 2780-2762 b. c.) The buildings in the court are replicas in stone of the primitive dwellings and shrine appearing on page 436.

King Djoser and the Wise I-em-hotep Usher in the Old Kingdom

DURING the reigns of the 18 kings of the Ist and IIInd Dynasties the development of the newly united nation was rapid. When, about 2780 b. c., Djoser, the Memphite, came to the throne as the first king of the IIIrd Dynasty, the Egyptians already possessed the political and administrative organization, the material equipment, and the cultural background requisite to the inauguration of that great era which we know as the Old Kingdom.

It was Djoser's chief counselor, the sage I-em-hotep, who, by his grandiose achievements in architecture and the allied arts and sciences, reaped the fruits of the preceding centuries of development; and, in doing so, established the standards and conventions which from now on governed Egyptian life, culture, and art.

Though the king was evidently a strong and able ruler, his fame has been almost completely overshadowed by that of I-em-hotep, a man renowned from his own day to this as an architect, a physician, a priest, a magician, a writer, and a maker of proverbs. Twenty-five hundred years after his death "he had become a god of medicine, in whom the Greeks who called him Imouthes, recognized their own Asklepios."

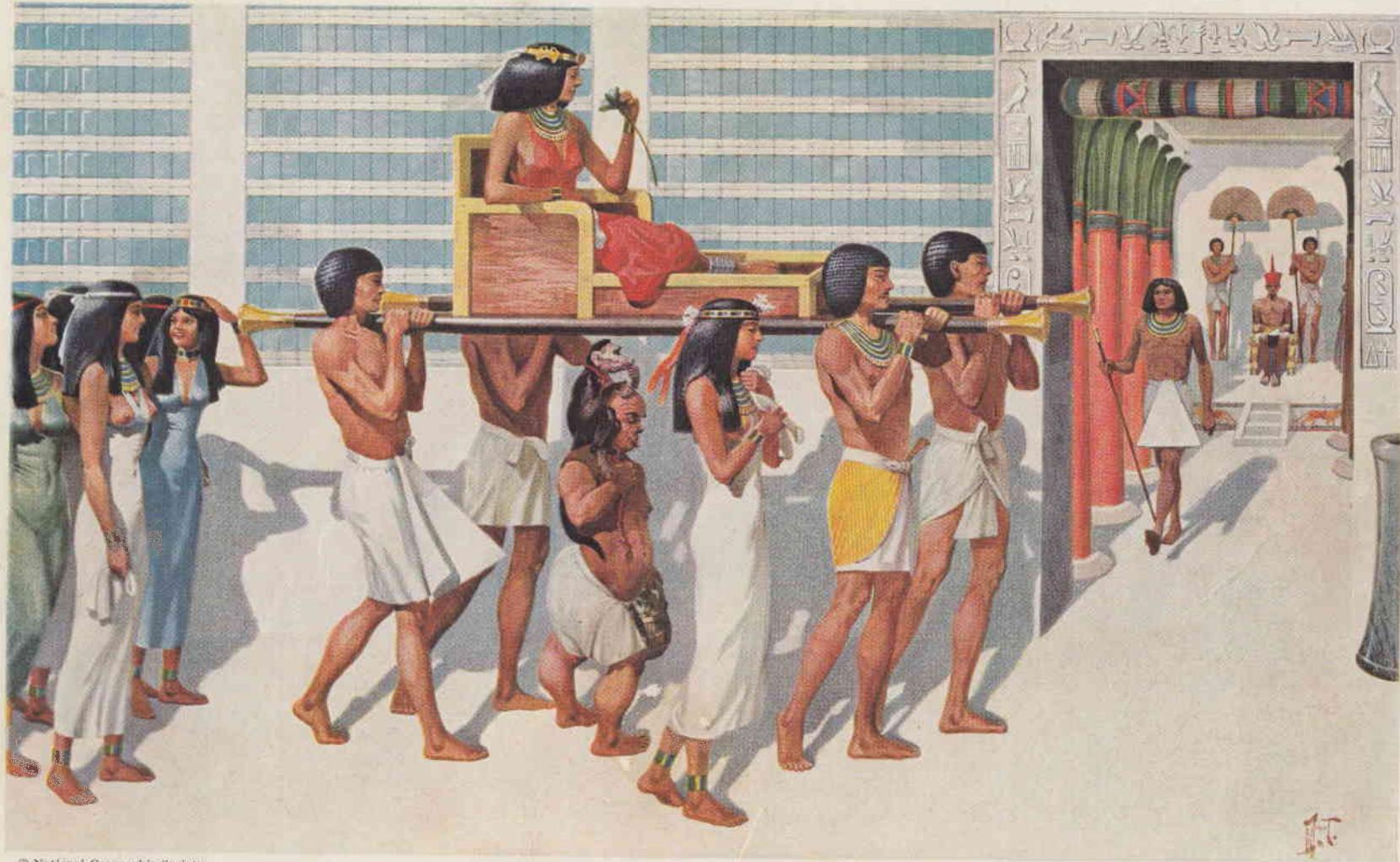
I-em-hotep's outstanding accomplishment as an architect is the step pyramid and extensive funerary complex which he built for Djoser at Saqqâreh (Saqqâra) south of mod-

ern Cairo and near the ancient capital city of Memphis. The pyramid, the earliest free-standing stone structure known, towers 190 feet above the desert plateau and is surrounded on all four sides by a vast walled enclosure, containing an elaborate group of shrines, storehouses, altars, courts, gateways, and secondary tombs—a veritable city in itself, planned and executed as a single unit and built throughout of fine white limestone from the nearby Muqattam Hills.

These remarkable buildings, excavated in recent years by the Egyptian government's expedition at Saqqâreh, are replicas in stone of the light wood, reed, and brick structures of earlier times, their columns, roofs, cornices, and walls preserving every structural and ornamental detail of the primitive and traditional house and temple forms.

On page 440 we stand with the king and his architect on the east girdle wall at Saqqâreh and gaze across the court of the *heb sed*, or royal jubilee festival, at the pyramid (page 422).

The striped linen cover of Djoser's massive wig, is one of numerous henceforth traditional forms of headdress worn by the kings of Egypt. His artificial beard, another of the common insignia of kingship, derives from the smaller but genuine chin beards affected by the earliest Pharaohs (page 438). I-em-hotep wears the leopard-skin uniform proper to one of his many offices—that of priest.



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Painting by H. M. Herget

"Mother of the King of Upper and Lower Egypt, Follower of Horus, Guide of the Ruler, Favorite Lady"

The Dowager Queen "whose every word is done for her, daughter of the god of his body, Hetep-heres," pays a call on her son, King Khufu, builder of the Great Pyramid. These quotations are inscribed on the back of the queen's carrying chair, now in the Cairo Museum. (IVth Dynasty, reign of Khufu, 2656-2633 b. c.)

The Builder of the Great Pyramid Receives a Visit from His Mother

THE time is the early IVth Dynasty, about 2650 b. c.; the place, a corridor leading into the throne room, or audience hall, in the king's palace at El Gîza.

On the throne dais at the rear of the hall sits the King of Upper and Lower Egypt, Khufu, the builder of the largest and most enduring tomb monument in history: a pyramid 767 feet at the base, 479 feet high, and containing 3,277,000 cubic yards of solid masonry—some 2,300,000 blocks of stone, each weighing on the average of two and a half tons.

Khufu, or, as the Greeks called him, Cheops, wears the Red Crown of Lower Egypt and is attended by his two fan-bearers and his master of ceremonies, the Overseer of the Audience Hall, seen advancing to meet the cortège.

The queen-mother, Hetep-heres, widow of the great Snefru, founder of the IVth Dynasty, is borne into the presence of her son in her gold-mounted carrying chair, raised high on the shoulders of four courtiers and followed by a group of fashionably dressed ladies of the royal harîm. Her pet dwarf waddles along under the chair, a picture of licensed impudence—ancient Egyptian counterpart of a medieval European court jester.

The student of ancient Egypt will immediately recognize the composite quality of this picture. The queen's carry-

ing chair and silver anklets we know to have been the property of Hetep-heres; for they were found in February, 1925, by the Harvard-Boston Expedition in her tomb on the east side of the Great Pyramid, together with a quantity of other splendid items of her personal property—all now in the Egyptian Museum in Cairo.

The gold tiara which the queen wears, on the other hand, is borrowed from another IVth Dynasty woman, whose tomb was recently discovered at El Gîza. Her wig is from the well known and nearly contemporary statue of the Princess Nofret.

The faience "matting" tiles in the corridor and the doorway into the audience hall are taken from the tomb of King Djoser of the preceding dynasty. The diorite stand to the right of the doorway—now in the Metropolitan Museum in New York—belonged to Khufu's son, King Kha'-ef-Rê' (Chephren).

The palm columns in the hall (here of wood) are from the mortuary temple of King Sâhu-Rê' of the Vth Dynasty, the throne dais from a relief in the mortuary temple of Queen Nêit of the VIth Dynasty. The types, clothing, coiffures, and jewelry of the figures have been faithfully copied from IVth and Vth Dynasty tomb reliefs.

The Egyptian Farmer—Winter Sowing in the Pyramid Age

THE receding waters of the yearly Nile flood have left the damp fields at El Giza ready for the planting of the winter crop of barley or wheat, and the steward of a large Old Kingdom estate has drawn the baskets of seed from the granary and rounded up his lord's serfs for the task of sowing. The steward himself may be seen in the middle distance, accompanied by the ever-present scribe, checking the distribution of the baskets of seed.

The sowers walk slowly across the muddy fields, turning to drop the seed as they go. The plows, drawn by teams of long-horned African cows, are used to turn the seed under, their shallow wooden shares being admirably suited to the purpose.

The heavy hooves of the draft animals are as important in this operation as are the plows themselves. Both are assisted in the task by the herd of goats, which bring up the rear of the procession, lured from in front by a handful of grain and driven from behind by the twisted rope whips of their herdsmen.

In the background appear, to the right, a temporary reed windbreak, used as a camp by the farmers during their weeks in the fields, and, to the left, a cluster of adobe houses and domed grain bins.

On the desert plateau beyond—remote as were their owners from the dirty, sweaty world in the foreground—rise the

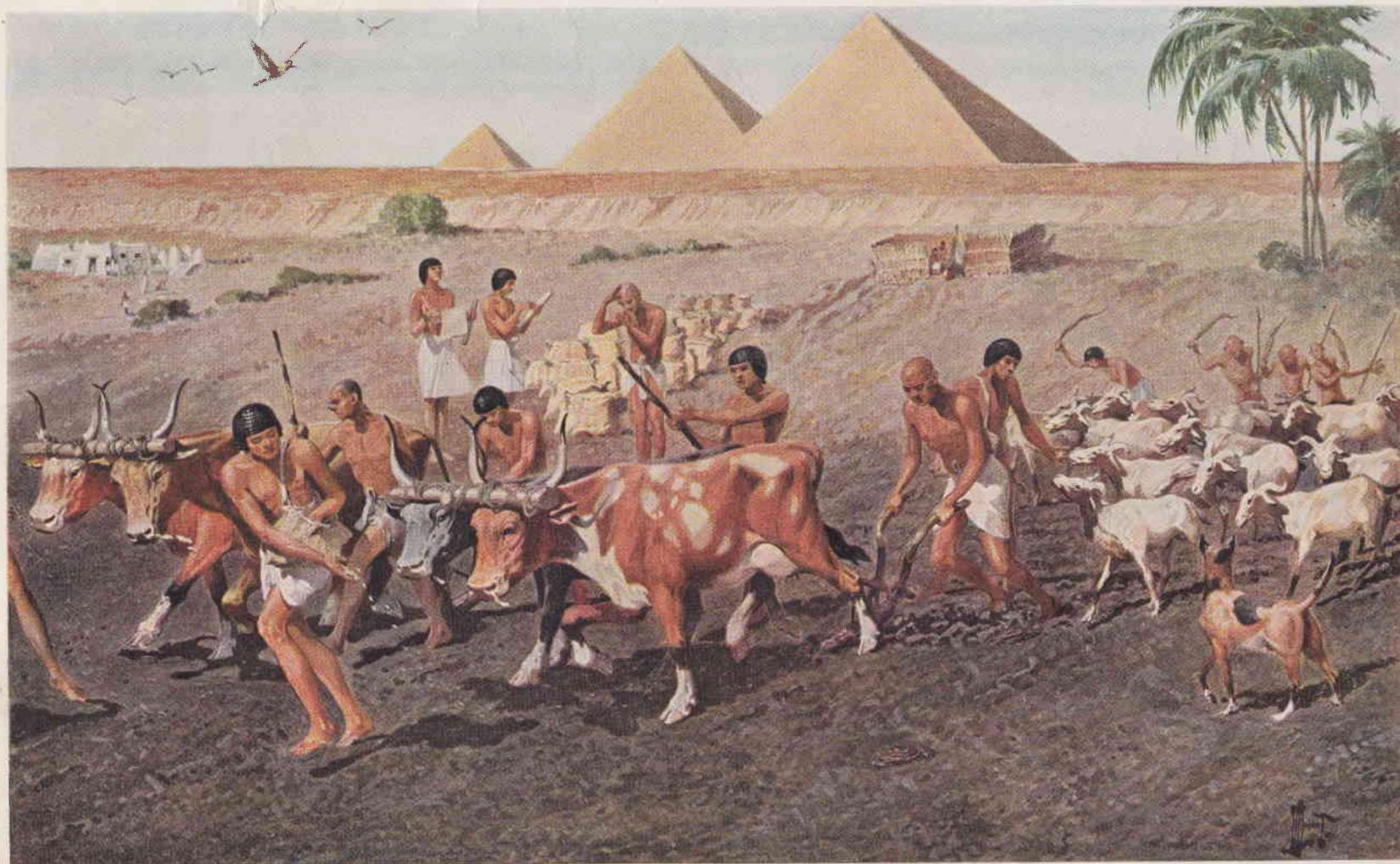
pyramid tombs of three great kings of the IVth Dynasty, Khufu (or Cheops), Kha'-ef-Rē', and Men-kau-Rē', father, son, and grandson.

Although the farming group is all drawn from a well-known Vth Dynasty tomb relief, it is characteristic of Egypt during most of its history, and, except for the garments of the men, might pass for a present-day scene. Certainly, the agricultural methods and equipment—notably the plow and the baskets—have changed very little in the last 4500 years.

The ancient farmer would feel at home in modern fields.

The conservatism and lack of inventiveness of the ancient Egyptian is nowhere else so well illustrated as in his continued use of the crude agricultural implements and irrigation machinery of his remote ancestors. In view of the fact that farming (with the accompanying problem of artificial irrigation) was his principal occupation and livelihood, it is surprising to note that such essential aids to agriculture as the well-sweep, the water-wheel, the Archimedes screw, and the disk thresher did not come into use in Egypt until relatively late times and then only as importations from abroad.

The well-sweep is shown in the color plate on page 495; but the water-wheel—a Graeco-Roman importation—was unknown to the dynastic people of Egypt and is therefore not portrayed in the paintings accompanying this article.



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"I Was One That Produced Barley and Loved the Grain God"

Painting by H. M. Herget

Peasant-farmers of the Old Kingdom sow seed in the fields near El Giza within sight of the three great pyramids. The Nile floods have receded, leaving the fertile soil ready for the planting of the crops which made Egypt a prosperous land. (Vth Dynasty, 2560-2420 B. C.)

Supplies of Food for a Resident of the City of the Dead—an Old Kingdom Maṣṭabeh Field Near Memphis

WHEN, early in the IIIrd Dynasty, the kings (and, subsequently, the queens) of Egypt adopted the pyramidal form for their tomb monuments, the earlier "maṣṭabeh" type was taken over by less important members of the royal family, nobles of the court, and well-to-do officials of the kingdom, remaining popular until the end of the Middle Kingdom.

The rectangular, flat-topped mass of masonry with steeply sloping sides is a direct development from the crude mound of sand or mud heaped over the prehistoric grave. The one or more pits to the subterranean burial chambers pass vertically down through the body of the maṣṭabeh, which is usually solid except for a small chapel, a smaller statue chamber, and one or two other tiny rooms built into its stone or brick core.

Like the homes of the living, these abodes of the dead were laid out in regular streets and form extensive "towns" grouped about the pyramids of the kings.

• In the plate opposite there spreads out before us part of such a maṣṭabeh town. Several types of maṣṭabeh appear in the group, but the one in the center, with the two "false

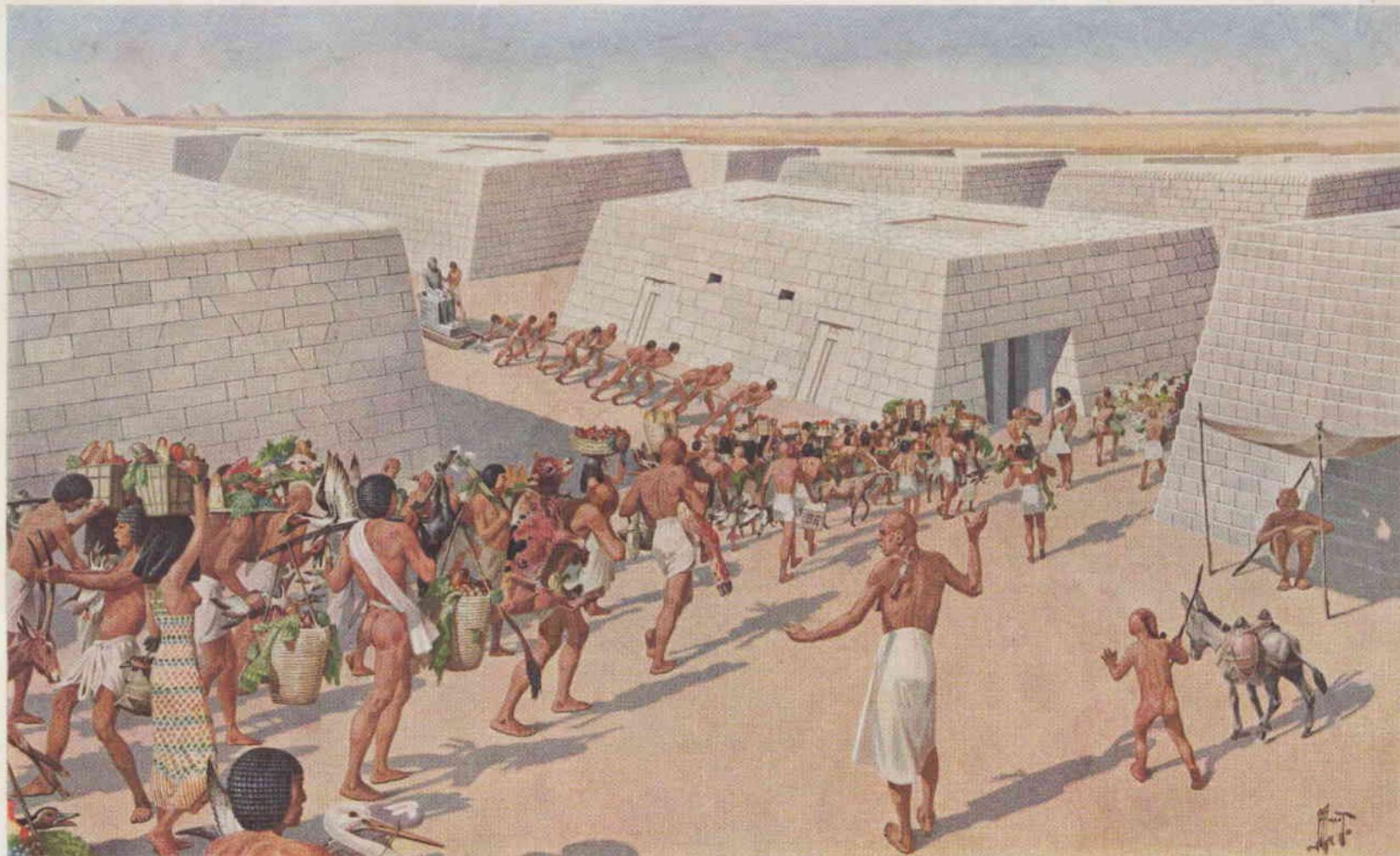
doors" in its east façade and the chapel portico in its northern end naturally draws our attention.

To this tomb comes a long and motley procession of servants of its deceased owner, bringing the "raw materials" for his periodical funerary banquet: beef, butchered, and on the hoof, game, fowls of every description, vegetables, fruits, bread, beer, wine, and flowers for garnishing the tables. A scribe, with his pen-case and water jar slung over one shoulder, herds the bearers along, and at the entrance to the maṣṭabeh chapel the mortuary priest receives and disposes of the offerings.

Along the street in front of the maṣṭabeh a funerary statue of the dead noble is being dragged upon a sledge over a track liberally "sloshed down" with water.

At the right of the scene a cemetery guard sleeps peacefully beneath his awning, while his small son brings up his daily supply of water on donkeyback.

In the distance stand the three Vth Dynasty pyramids at Abusir (Abú Sîr) and, farther to the south, the pyramid of Snefru and that of Huni of the IIIrd Dynasty at Dahshûr.



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Painting by H. M. Herget

"... And Homage Done to This Excellent Noble's Lordly Soul, Now That He Is a God That Liveth Forever, Magnified in the West"
Food offerings are here brought to a "mastabeh" tomb in the Memphite necropolis. This was a scene often enacted in ancient Egypt. The people believed that after death they would continue to use and enjoy all the comforts they had known in life. (Vth Dynasty, 2560-2420 B. C.)

Netting Wildfowl in the Marshes

FOWLING with the ancient Egyptians was both a sport and a means of livelihood, entered into with equal zest by the rich man out for a few hours' amusement, by the peasant in search of a succulent meal, and by the professional fowler, whose whole time was devoted to supplying the larders and stocking the poultry yards of his employers or clients.

Small land birds were caught in little spring traps of ingenious design; but the chief victims of this combined pastime and business were the wild goose, the pintail duck, and the widgeon, which during the migratory seasons swarmed over the pools and waterways of Egypt in apparently countless thousands.

Of the several devices used for catching these birds alive one of the most common and certainly the most spectacular was the large "clap-net" of the type shown in our painting. It appears to have been operated somewhat on this order:

A small pool, known to be frequented by wildfowl, having been selected and baited, the two halves of the net were spread out flat on either side of it, their inner edges "hinged" on staked cords, their outer edges provided with securely anchored draw-ropes, as shown.

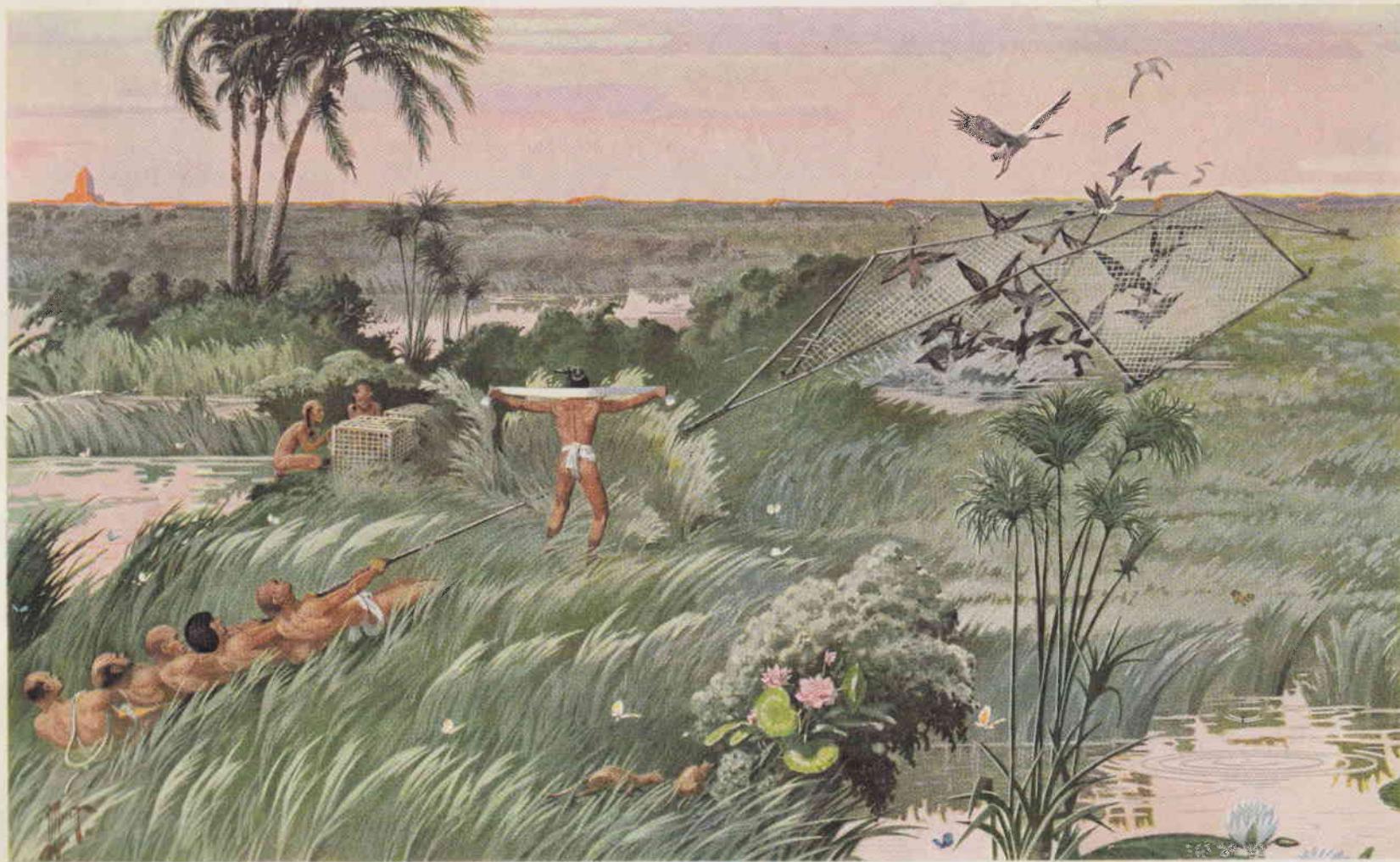
The five fowlers manning the draw-rope squatted low in the tall grass of the marsh, leaving only the look-out, his

cranium camouflaged by a cap shaped to resemble a duck's head, peering over the top of his blind. When enough birds had alighted on the pool to satisfy the watcher that a good catch would be made, this man sprang up suddenly, throwing his arms wide and spreading his white sash across the back of his shoulders.

His companions, taking the signal, straightened up and, with a mighty heave which landed them all on their backs, swung the wings of the net up, over, and down on the already rising birds, flattening them against the surface of the pool and snaring many in the meshes of the trap.

At this point the small boys, waiting in the background with the empty crates, went into action and captured a dozen or so live ducks for the roasting spit or the poultry farm.

The clap-net is frequently represented in tomb reliefs and paintings, especially those of the Old Kingdom. Because of the often puzzling conventions of drawing used by the Egyptian artists, the exact form and the exact method of manipulation of the net has presented something of a problem to the modern student. The reconstruction shown is one of the several accepted ones. It is, however, not unlikely that the netting extended, in triangles below the draw-ropes, beyond the limits of the rectangular frames.



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Painting by H. M. Herget

"It Is Good, However, When the Net Is Drawn and the Birds Are Made Fast"

Fowlers operate a clap-net in the marshes near Abusir (Abu Sir). The flora of this characteristic Egyptian swampland includes clumps of palm trees, long swamp rushes, the tall papyrus, and the Egyptian lotus, or water lily. In the left background appears the great solar obelisk and sun temple built by King Ne-Woser-Re' of the Vth Dynasty (2515-2486 B. C.)

The Egyptian Scribe and His Equipment

THE career of "scribe" in ancient Egypt was as exacting in its requirements as it was honorable and profitable in its rewards. A young man fortunate enough to have passed through the great school of scribes at Memphis or, later, at Thebes was expected not only to be able to read, write, and draw with a skill approaching perfection but also to have a thorough knowledge of the language, literature, and history of his country.

Furthermore he must be well versed in mathematics, bookkeeping, law, management and maintenance of personnel, general administrative procedure, and even such subjects as mechanics, surveying, and architectural design.

Once a man had qualified as a scribe, he automatically became a member of the educated official class. This status exempted him from menial labor of any sort, and he could rise through a series of recognized stages to the very highest offices in the land.

The scribe of page 451, seated with his fellows in the chancellery of a great estate of the Vth Dynasty, is engaged in making an inventory of his lord's linen supply. He is assisted in the task by a fat under-treasurer, who is reading off to him the distinguishing marks written on a corner of each sheet.

The writer sits cross-legged, making the tightly stretched front of his linen kilt serve as a desk. He writes from right to left in a fine "hieratic" hand, using a slender brush composed of a reed with a carefully frayed and trimmed tip.

His excellent paper is made of narrow strips of the pith of the papyrus reed, crossed in two directions,

pressed together, and subsequently burnished. His writing pigments—black and red—are contained in the two bowls of an alabaster palette, or ink-stand, which may be seen lying on the floor by his right knee.

To the ring on the end of the palette is attached a pointed piece of rag or other substance, which serves as an eraser. Next to this is the hard stone slab and grinder for pulverizing the pigment.

The scribe's bronze basin, containing the water for mixing his pigments, rests on the leather trunk, in which he keeps his rolls of fresh papyrus. The small inscribed cylinder, suspended from his neck, bears his master's name, and is used for sealing documents, cases of goods, and other items pertaining to the estate.

Linen cloth, as we have seen, was woven in Egypt from remote prehistoric times. Usually of excellent quality, it varied in texture from a coarse burlap-like cloth to the finest, gossamer cambric. Ordinarily the cloth was woven in long sheets, or bolts, finished at one end with a long fringe, and having a selvage edge and short selvage fringe along the sides.

In addition to weavers' marks, woven into the fabric, the sheets were often marked at one corner with a short ink inscription, giving the name of the individual, estate, or government department to which they belonged. The latter marks are similar in appearance and, to some extent, in purpose to the modern laundry marks. Dated sheets, found on mummies, have been valuable aids to researchers who have sought to reconstruct some of the more obscure periods in Egyptian history.



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Painting by H. M. Herget

"But the Scribe Directeth the Work of the People"

"For him there are no taxes, for he payeth tribute in writing." A staff of professional scribes works in the administrative office of a large Old Kingdom estate. (Vth Dynasty, 2560-2420 B.C.) The brightly colored lotus columns—so seemingly out of place in a business office—bespeak the ancient Egyptian's love of floral ornament.

A "Dwarf of the Divine Dances from the Land of the Spirits" as a Gift to the Boy King of Egypt

IN THE second year of the reign of King Pepy II of the VIth Dynasty a caravan led by Prince Ḥar-khūf, Lord of Elephantine and Governor of the South, reached the First Cataract of the Nile, having journeyed far to the south to the distant country of Yam. It had returned with a rich cargo of gold, ostrich feathers, ebony logs, panther skins, ivory, and, last but not least, a dancing pigmy from Central Africa as a gift to the pharaoh.

Since "the Lord of the Two Lands, the King of Upper and Lower Egypt, Nefer-ka-Rē', the Son of Rē', Pepy" was eight years old at the time, he was considerably more elated over the pigmy than he was over the material addition to the national treasury. When Ḥar-khūf was about to board ship for the journey down the Nile to Memphis, he received a long and excited letter from his king, urging him to take every precaution to see that the little creature arrived safely.

"When he goes down with thee into the vessel," wrote Pepy, "appoint excellent people who shall be beside him on each side of the vessel . . . lest he fall into the water. When he sleeps at night, appoint excellent people who shall sleep beside him in his tent; inspect ten times a night."

Ḥar-khūf's ship, its two-legged mast unstepped and its Nubian crew bending lustily to the oars, is seen speeding downriver against the prevailing wind. Unlike those of the freight boat, which is passing up river under sail, the steering oar of the governor's ship is equipped with the newly invented rudder post and tiller.

Ḥar-khūf sits before his comfortable, leather covered cabin, his body-guard and traveling trunks on his right, his orchestra on his left, and

roars with laughter at the antics of his small charge. The latter is in the direct care of a full sized compatriot—presumably an "excellent person"—who, as can be seen, is taking no chances of losing the little dancer in the Nile.

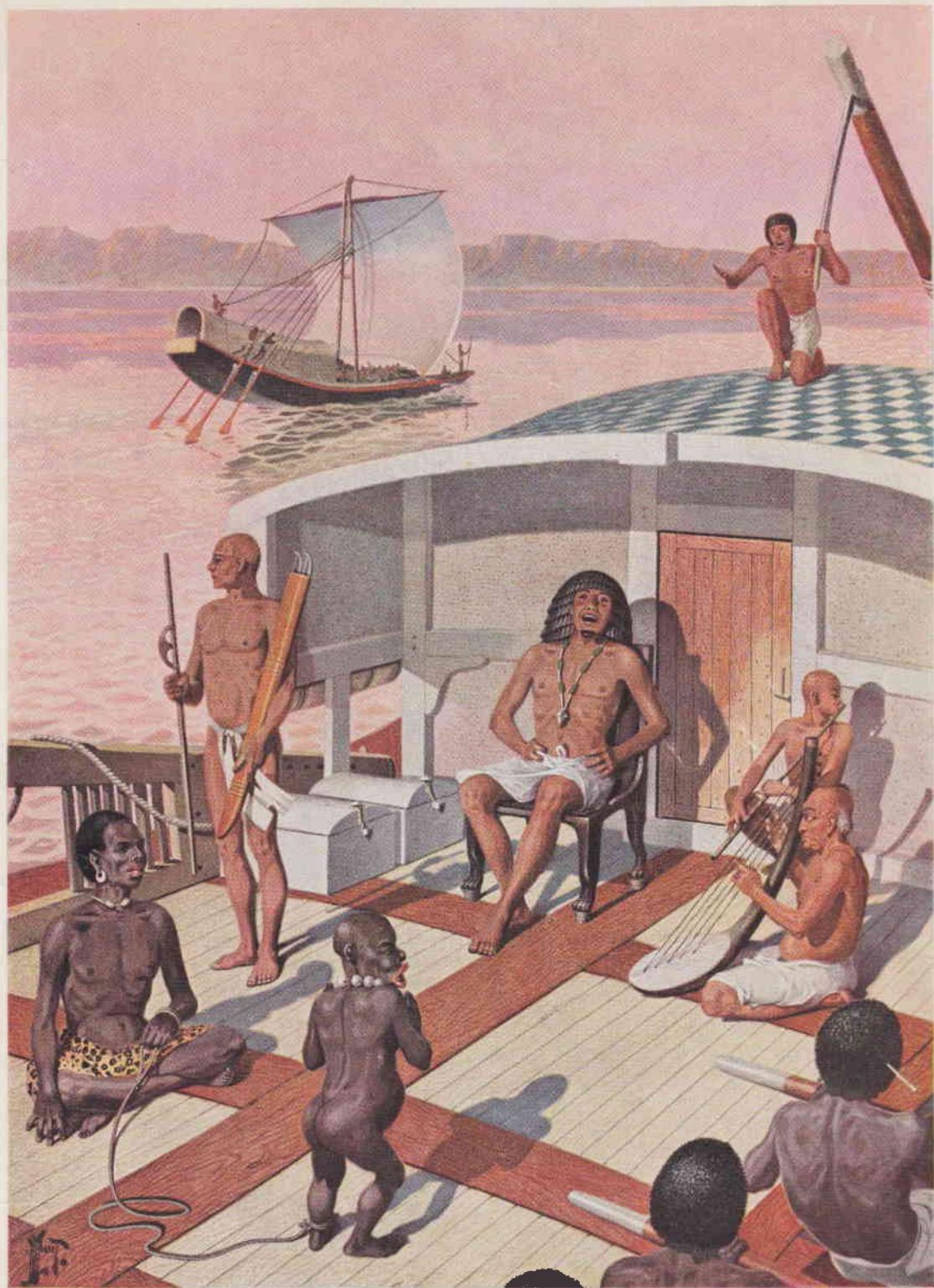
Since Ḥar-khūf proudly inscribed the account of his trip and a copy of the now famous letter on the façade of his tomb opposite Elephantine, we may assume that both the ship and the king's present reached their destination in good condition.

The First Intermediate Period (2270-2160 B. C.) and the Middle Kingdom (2160-1788 B. C.)

Throughout the Vth and VIth Dynasties the power of the landed nobility had risen steadily until, toward the end of the VIth Dynasty, it threatened to overshadow that of the king himself. During the short reigns of the weak rulers who succeeded Pepy II this threat became a reality. The central government was disrupted or ignored; the country broke up into a series of petty states; and the Old Kingdom came to an ignominious end in dissension, internal strife, local feuds, and general disorder.

These conditions existed for more than a century, with first one prince-ling and then another claiming sovereignty over the land. During this period there rose and fell in rapid succession the VII and VIIIth Dynasties of Memphis and the IXth and Xth Dynasties of Herakleopolis, now Ihnâysa el Madîna.

About 2160 B. C., the warrior nomarchs of Thebes, by defeating the Herakleopolitan confederacy, reestablished firmly the pharaonic rule, and as kings of the XIth Dynasty founded what we know as the Middle Kingdom.



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Painting by H. M. Herget

"Come Northward to the Court Immediately and Bring This Dwarf with Thee"

Prince *Har-khuf*, governor of Nubia, travels down the Nile with a pygmy as a gift to King *Pepy II*. The figure of the dancing pygmy is taken from a little ivory statuette found at *El Lisht* in 1933 by the Egyptian Expedition of the Metropolitan Museum in New York. (VIth Dynasty, 2nd regnal year of *Pepy II*, 2331 B. C.)

An Ancient Egyptian Brewery

THE Middle Kingdom has been characterized truly as Egypt's "feudal age", and, if under the XIIth Dynasty the country rose to new heights of greatness, it was because the kings of this dynasty were strong enough and wily enough to dominate the powerful nomarchs, to gain their loyalty, and to turn their vast resources to the uses of the crown and of the nation.

Beer was the ancient Egyptian's favorite beverage, and on the estates of the great lords of the Middle Kingdom the brewery ranked next in importance to the granary and the bakery, on both of which it was dependent.

The brewery of page 455 is taken from a wooden funerary model found at Thebes in the tomb of the Chancellor Meket-Rē', a wealthy official of the XIth Dynasty.

In it we see the complete process of brewing the simplest and apparently the most common of the several types of beer consumed in ancient Egypt. Barley or wheat, brought in baskets from the granary, is first cracked in a stone mortar, then ground to coarse flour on the limestone mill (left). This arduous task was regularly reserved for a woman.

The flour scooped out of the catch-basin of the mill passes to the man in the left background, who works it into dough on his kneading tray, adding to the new dough the yeasty residue from the last baking of bread. The loaves of dough

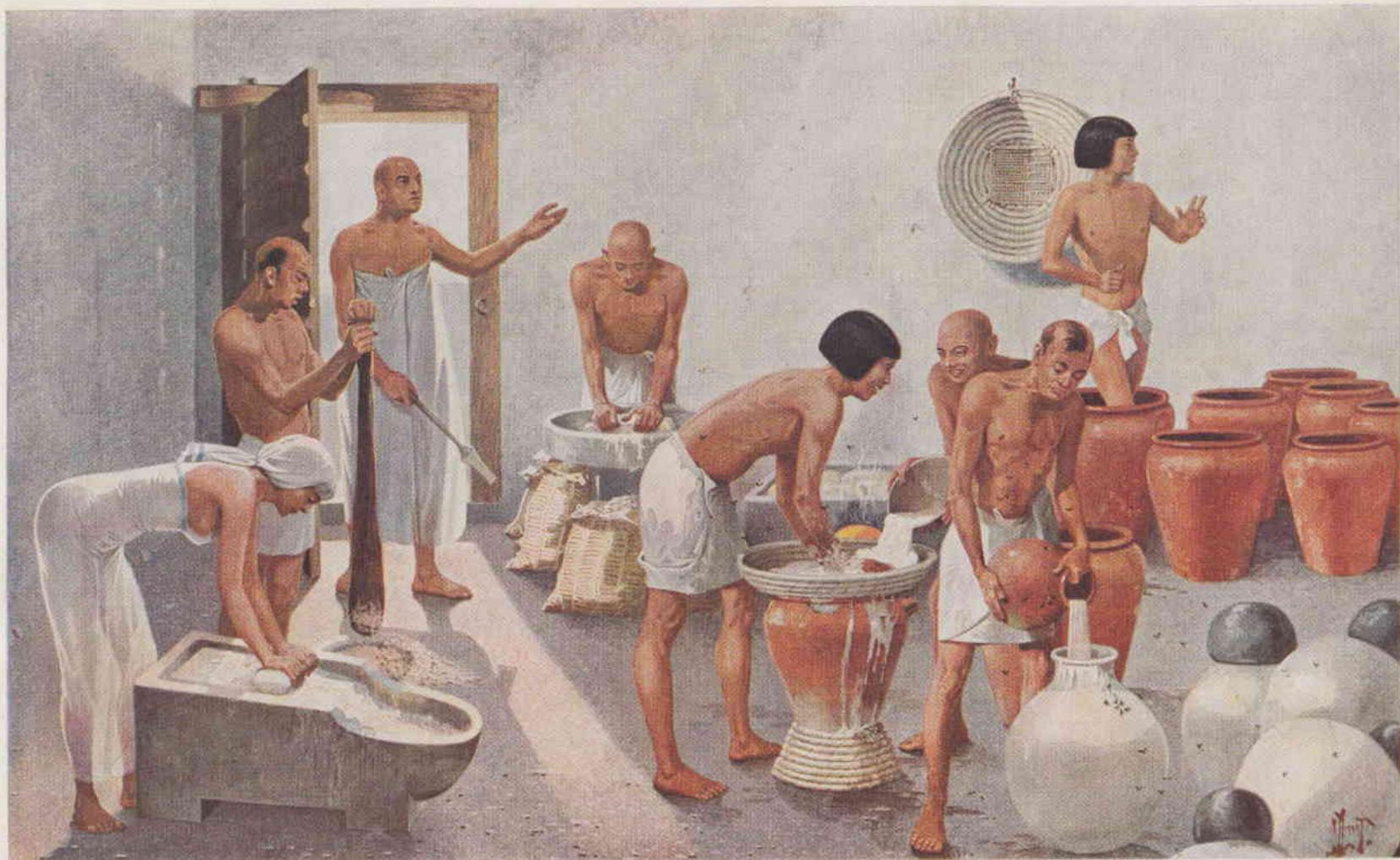
are placed on the low stove next to the kneading table and heated until they have fully risen.

They are then crumbled up and thoroughly mixed with a large quantity of water in the great jars in the right background. In the mixing process a man steps into the jar and treads the mash with his feet.

After several days' fermentation the thick, lumpy liquid is strained through a sieve into the specially designed brewer's vat in the foreground. The spout of this vat is so placed that it allows the beer to be poured off, leaving the barm at the top of the vat and the dregs in its bottom. The beer is "bottled" in pottery jars stoppered with hemispheres or cones of Nile mud.

The resulting beverage, except for the absence of malt, resembled the modern Egyptian wheat beer, or "booza", a liquid with the consistency of thin gruel, averaging around 7 per cent in alcoholic content.

The hard, greenish white pottery, of which the ancient beer jars were made, is still the favorite material of the potters of the modern province of Qeneh (Qena) in Upper Egypt. Here are produced from the same pale desert clay the present-day "zīr," "gulleh," and "ballas"—water jars par excellence—the last much photographed on the heads of the slender daughters of modern Egypt.



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"Beer Is Brewed for Him on the Day of His Festival"

By the doorway of a Middle Kingdom brewery stands the portly brew-master, his sceptre of authority in his hand, and the workers bend to their tasks though there is no threat in the attitude of their overseer. The funerary model from which this group was derived is in the Metropolitan Museum in New York. It was found at Thebes by the museum's Egyptian expedition in the spring of 1920. (XIIth Dynasty, reign of King Mentu-hotpe III, 2060-2015 B. C.)

Painting by H. M. Hergel

An XIth Dynasty Carpenter's Shop

LACK of good native timber woods and metal fastenings combined to make the Egyptian carpenter a past master in his craft. He learned to produce sizable boards and beams by the patient and artful piecing together of the short and narrow cuttings obtainable from his scrubby local trees—sycamore fig, acacia, tamarisk, sidder, and willow.

Using as fastenings only tapered and straight hardwood pegs, he managed by skillful joinery to construct coffins, shrines, boxes, sledges, doors, and articles of furniture, many of which remain strong and rigid to this day.

At an early period the Egyptians began importing wood, the timber fleet plying between the Delta and the Syrian coast bringing cargo after cargo of cedar, cypress, fir, and pine from the Lebanon. The caravans and boats of the upper Nile also supplied the workshops with Sudanese ebony and other tropical woods.

Good wood, however, remained a costly luxury and was always used with the utmost care, considerable labor and skill often being expended to obtain a fine, massive effect with the minimum outlay of material.

The sides and ends of the coffin under construction on page 457, for example, are tapered in thickness from top to bottom, so that the visible top edges of the finished box will

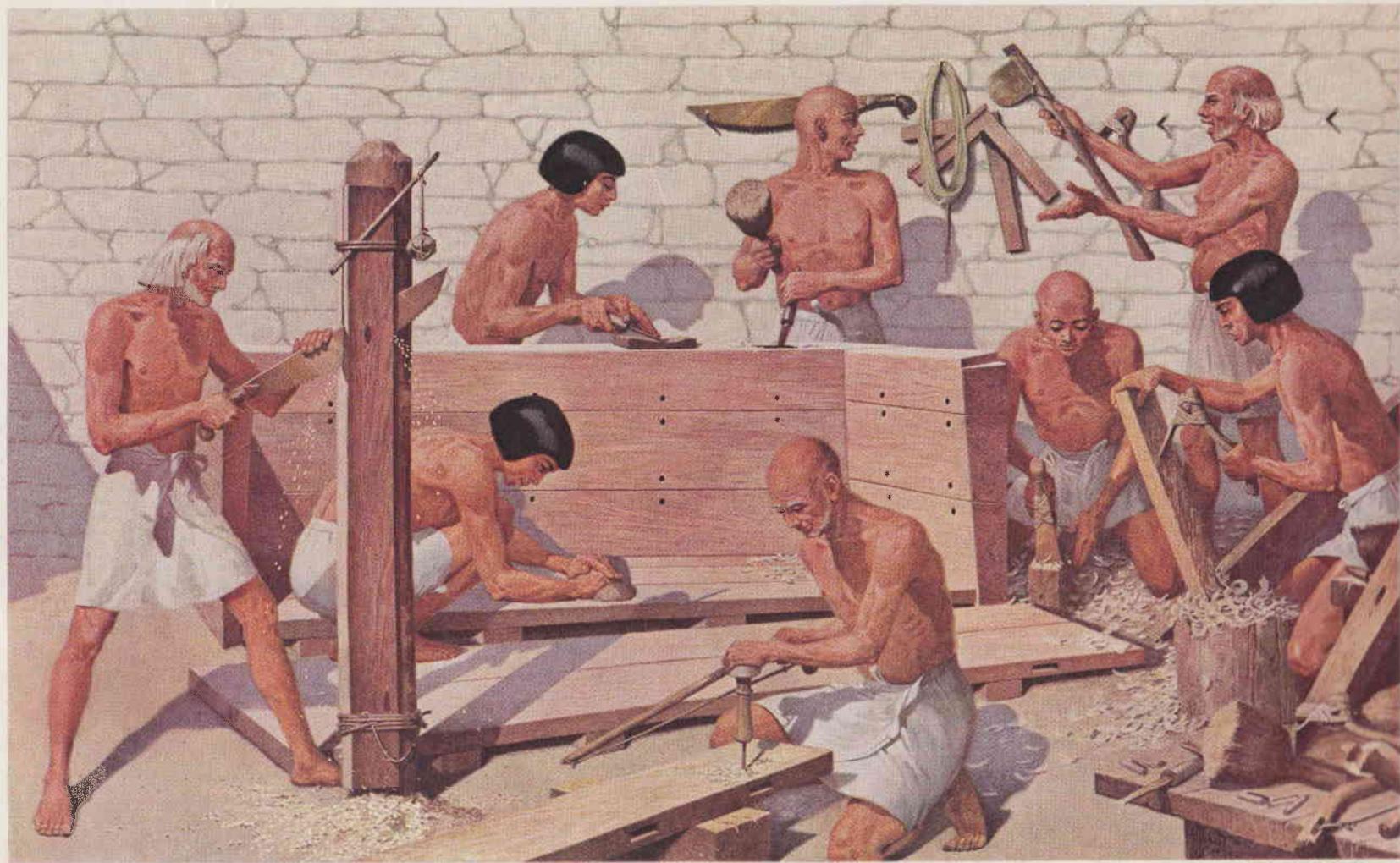
display a massiveness suggesting the presence of almost twice the amount of wood actually used.

In addition to the pegged tenon and overlapped mitre joints appearing in this coffin, the Egyptian carpenter was acquainted with most of the devices known to the modern cabinetmaker, including the various rabbet, dado, and lap joints, and the dovetail.

His bronze cutting and boring tools—saw, adze, axe, chisel, knife, scraper, and bow drill—were equipped with hardwood handles. His mallet and square were of hardwood, and his whetstone usually of quartzite.

The “plane” used by the man in the center of the picture is a lump of sandstone with a carefully flattened abrading surface. Other abrasives, such as fine sand, were employed for giving the wood surfaces a smooth, even finish. A glue, much like modern carpenters’ glue, and a coarse “crack filler” were also used by the ancient Egyptian worker in wood.

When finished, the coffin and its lid will be coated inside and out with a thin layer of stucco, painted in brilliant colors, and inscribed with appropriate funerary texts. Prominent on its left side will be the great pair of painted eyes, through which its deceased occupant may gaze forth each morning toward the east and the rising sun.



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"Many Artificers Built It, and All Its Woodwork Was New Appointed"

In a carpenter's shop of the Middle Kingdom, one of the heavy, rectangular coffins typical of this period, is in process of construction. The simple but serviceable tools are employed by the hands of master craftsmen and the pieces of lumber are joined with wooden tenons and pegs. (XIth Dynasty, 2160-2000 B. C.)

Painting by H. M. Herget



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Painting by H. M. Herget

"I Would Build for Thee a New Mansion . . . Planted with Trees upon Every Side of It." "Thy Young Folk . . . Shout for Joy Over Thee"
Children at play in the garden of a country estate of the Middle Kingdom demonstrate the happy, carefree life of the early Egyptians, who were ever a human and jolly folk. Represented in tomb reliefs as early as the Old Kingdom, the boys' game is usually labeled "Going round four times." (XIIth-XIIth Dynasties, 2160-1788 B.C.)

The Formal Gardens and Informal Children of Ancient Egypt

IN LAVING out and planting the walled parks surrounding their pleasant country villas, the Egyptians displayed the conventionality, orderliness, and love of symmetry which are outstanding in their art and, indeed, in their whole life.

Before any extensive orchard or garden was actually started, sketches were made and from these finished plans were drawn, showing the distribution of pools, trees, and avenues, and containing written notations of the more important distances and spacings.

The pools, all shallow, were for ornament, not for bathing. Though Egyptians could swim, there is no record of their going in for swimming as a sport. Crocodiles were too numerous in the Nile.

The installation and upkeep of the park was entrusted to a staff of professional gardeners, headed by an "Overseer of the Garden", who evidently regarded himself as a person of no small importance. The excellent taste of the ancient Egyptian and his very real love and understanding of nature invariably produced most happy results.

From his high-roofed front verandah, with its brightly painted lotus-bud columns, the country gentleman of page 458 looks out over his large rectangular lotus pool, stocked with fish and bordered by regularly spaced clumps of flowers and flowering shrubs: mandrakes, oleanders, jasmine, bind-

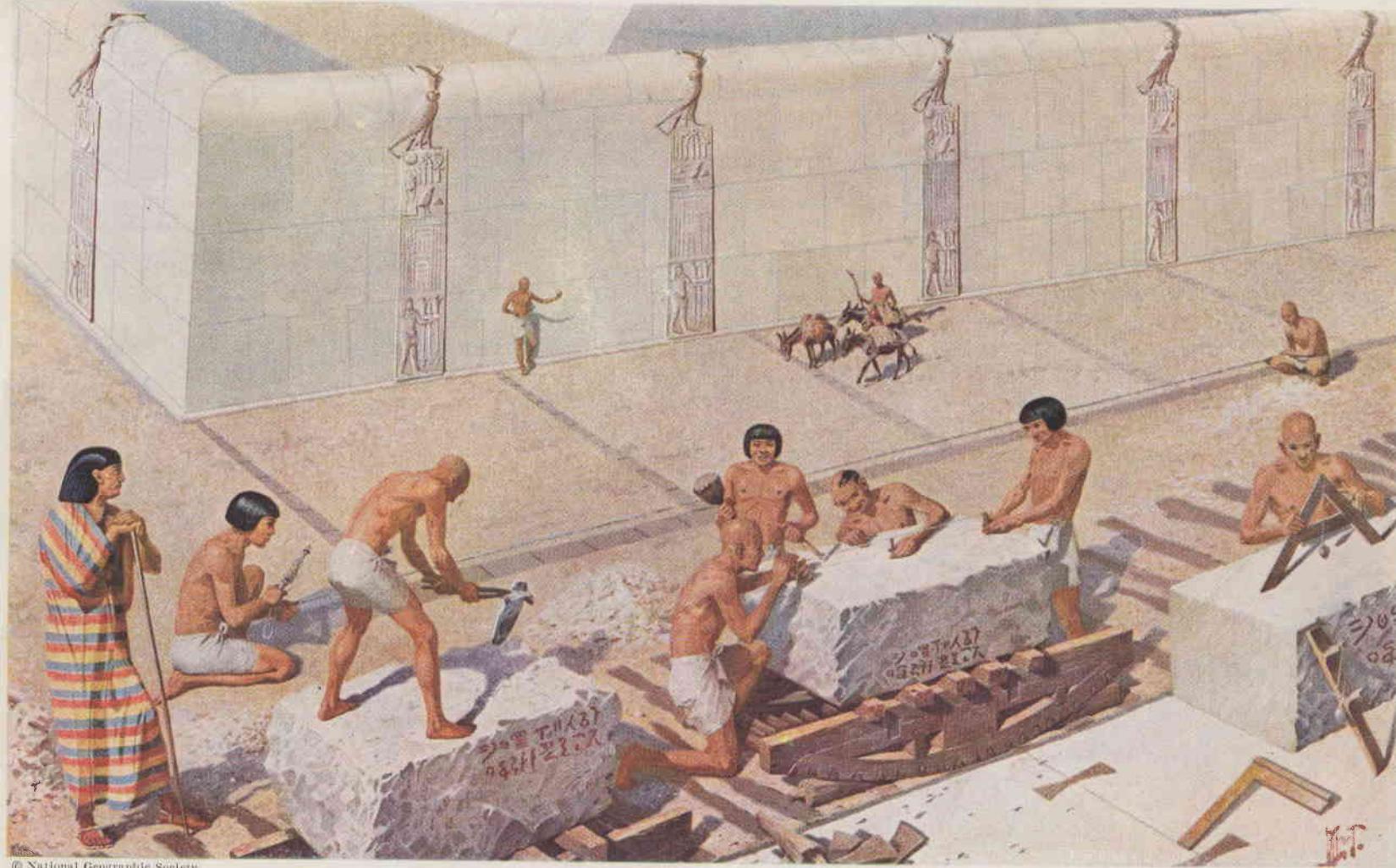
weed, cornflowers, and dwarf chrysanthemums. Around this aquatic and floral centerpiece are ranged rows of sycamore fig trees, and, behind these, the tall date and dōm palms.

The great man's children and their friends, idolized by their proud and indulgent parents, have the run of the garden. The boys, with their heads shaven except for the braided side lock of "youth", are unhampered by clothes. The girls, clad in simple one-piece dresses, wear their hair in "pigtails."

The more or less self-explanatory games in progress are chosen from a score or so of children's pastimes depicted on the walls of Middle Kingdom tombs. Even the cat and the ridiculous little dachshund-like dog are authentic XIIth Dynasty types. The painted wooden "paddle" doll, well known in the XIth Dynasty, though not originally designed as a child's toy, could and probably did serve as such.

Most interesting are the balls, with which the girls are playing. With cores of tightly packed barley husks and stitched leather covers, they resemble the modern baseball.

The verandah, pool, and garden are from a miniature produced by an Egyptian model-maker of the Third Millennium B. C. The model, with its high wall, brightly painted little columns, and tiny wooden trees, is in the Metropolitan Museum in New York. The oxidized copper lining of its small pool shows that the latter was once filled with water.



© National Geographic Society

"Let Your Hands Build, Ye People. Let Us Lay the Foundation Stone"

Stone-masons work in the outer enclosure of the pyramid of King Se'n-Wosret I at El Lish. The heavy blocks of limestone can be turned easily by means of the wooden rockers on which they rest. (XIIth Dynasty, reign of Se'n-Wosret I, 1980-1939 b. c.)

Painting by H. M. Herget

The Egyptian Stonemason and His Craft—Construction Work on a XIIth Dynasty Pyramid Site

THE scene shifts from the cool shade of an Upper Egyptian garden to a section of the sun-baked desert plateau on the west side of the Nile some thirty miles south of modern Cairo; and we find ourselves, on page 460, in the outer enclosure of the pyramid of King Se'n-Wosret I, the second pharaoh of the XIIth Dynasty, who ruled Egypt with a strong hand between the years 1980 and 1939 b. c. Across the back of the scene stretches the limestone inner enclosure wall of the pyramid, bearing the elaborately carved name panels of the king.

In the foreground construction is in progress on the girdle wall of one of the many small pyramids which surround that of the monarch. Masons are dressing and laying the rough blocks of limestone, newly brought from the quarry. The transport inscriptions, recently painted on the sides of these blocks, are dated to the 12th Day of the 1st Month of the season of Shōmu, in the 12th Regnal Year (of Se'n-Wosret I), in other words, mid-September, 1969 b. c.

The blocks are being handled on stout wooden stone-rockers, which can be swung around with ease, tilted to any desired angle, and, by means of a series of heavy wooden hand wedges thrust under their runners, raised vertically as

much as two or three feet. To prevent them from sinking into the sand, the rockers are operated on a track of heavy timber balks.

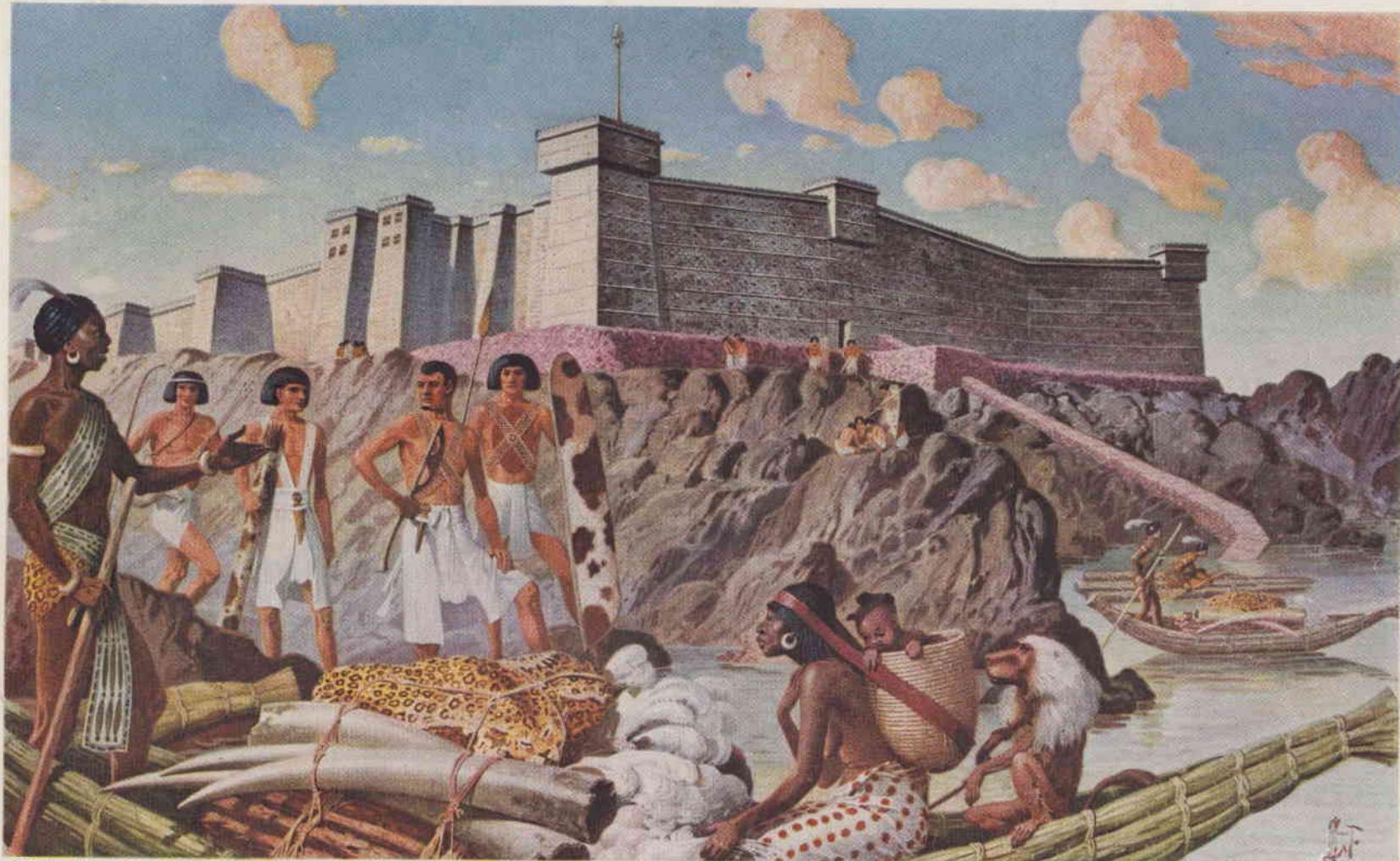
The man on the left-hand block is rough-dressing its surfaces with a hard stone maul.

Those about the right-hand block are checking the final dressing of its joint surfaces with a set of "boning rods": three rods of equal length, over the tops of two of which a cord is stretched from edge to edge of the surface being tested. The third rod, moved back and forth with its top always under the tightly stretched cord, serves to locate "high spots" in the surface. These are then dressed away by the man with the chisel and mallet.

The chisel is of bronze, hardened by prolonged hammering.

The blocks are laid in a coarse white gypsum mortar; and those in the foundation course of the wall are held together by stout wood "cramps".

Elsewhere in the scene we see, either in the hands of the men or lying about in the foreground, the mason's reel and line—used here to check the alignment of the leveling bricks of the court—and the mason's level, plumb, and square.



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Painting by H. M. Herget

“ . . . In Order to Prevent Any Negro from Passing It by Water or by Land”

Egyptian soldiers of the Middle Kingdom question a negro merchant in the river narrows below the southern frontier fort at Semna. The ram's head standard on the fort indicates that its garrison is composed of a battalion of the Regiment of Amún. (XIIth Dynasty, reign of King Se'n-Wosret III, 1887-1850 B. C.)

An Ancient Egyptian River Fort on the Sudān Frontier

FOR some distance below its second cataract the Nile, forcing its way through outcrops of hard, crystalline rock, forms a series of narrow rapids, which, though navigable in antiquity by light, shallow-draft boats, exposed traffic to blockades and attacks by partly subjugated savages.

To protect their own commerce with the south and to control the native traffic both by land and water, the Egyptian kings of the XIIth Dynasty built a line of forts along these rapids on both sides of the river. The best known and best preserved of them are the pair flanking the Semna rapids, 50 miles south of Wadi Halfa.

The west fort at Semna, shown reconstructed on page 462, though founded originally by King Amen-em-hēt I, was named "Powerful-is-King-Se'n-Wosret III", having been greatly enlarged and improved by the latter pharaoh (1887-1850 B. C.). Its great L-shaped plan was enclosed within massive walls of sun-dried brick, 15 to 25 feet thick and more than 30 feet high.

The walls, strengthened by longitudinal and transverse timbers and equipped with towers, buttresses, and battlements, were built on an embankment of granite rubble.

In addition to the towered north and south gates, there were, on the river side, a small postern gate and a covered

stone stairway leading down into the Nile. This well protected stairway enabled the soldiers who were defending the garrison to obtain a constant supply of water even in times of the closest siege.

The fort was a canny piece of military architecture, perfectly adapted to the rocky prominence on which it was built and so devised that all approaches to it were difficult and hazardous. Early in its history it withstood a siege of several months.

The 150 to 300 Egyptian soldiers stationed in the fort lived with their women and children in a small town, built inside the walls and including, among sundry other buildings, several little brick temples.

On page 462 a detail of typical Middle Kingdom soldiers, in charge of an officer, is halting for inspection, a negro trader, who, with his family and heavily laden papyrus canoe, is en route northward. By decree of the pharaoh, the only negroes who were permitted to pass the forts at Semna were those on "official business" or those headed for the Nubian trading post at Iken.

Besides ivory, wild animal skins, and other cargo the negroes' canoe carries a dog-headed baboon (*cynocephalus ape*) of a well known breed, evidently a pet.



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Painting by H. M. Herget

"Making Every Visitor Welcome, Forwarding Travelers North and South"

Prince Thûty-hotpe, lord of the "Hare" nome, provides entertainment for a visiting Bedawîn sheikh and his family. Wrestling was an immensely popular sport among the Egyptians of the Middle Kingdom, and many hotly contested bouts are depicted in detail on the walls of the great tombs at Beni Hasan esh Shurûq, Mir, and Deir el Barsha. The nomarch's dogs are Sudanese greyhounds. (XIIth Dynasty, reign of King Sc'n-Wosret III, 1887-1850 B.C.)

An Egyptian Nomarch Entertains a Bedawīn Sheikh

ALTHOUGH the Egyptians always regarded as barbarians, 294 the dwellers in the deserts to the east and west of the Nile and the Asiatic tribes farther to the north, they carried on a lively commerce with these peoples. More often than not during the Old and Middle Kingdoms, the trade was conducted on an entirely friendly basis.

It is therefore not surprising to find the "Prince, the Confidential Friend of the King, the Great Chief of the Hare Nome", Thūty-hotpe, extending the hospitality of his verandah to a desert prince and his family—little knowing that within a few hundred years these same people, the "Hyksos", were to invade and to subject to their warlike rule the whole of northern Egypt.

The Hyksos Abshai—for that is the sheikh's name—has just delivered a shipment of galena, used by the Egyptians as an eye cosmetic, to Prince Khnūm-hotpe, ruler of the Oryx Nome, whose domain was situated in Middle Egypt, immediately to the north of that of Thūty-hotpe. On his way home he has stopped to pay a state call on the latter.

For the amusement of his guest Thūty-hotpe has staged a series of wrestling matches such as those depicted in detail in the famous wrestling sequence found at Beni Hasan (pages 424 and 425). These contests of skill and strength will

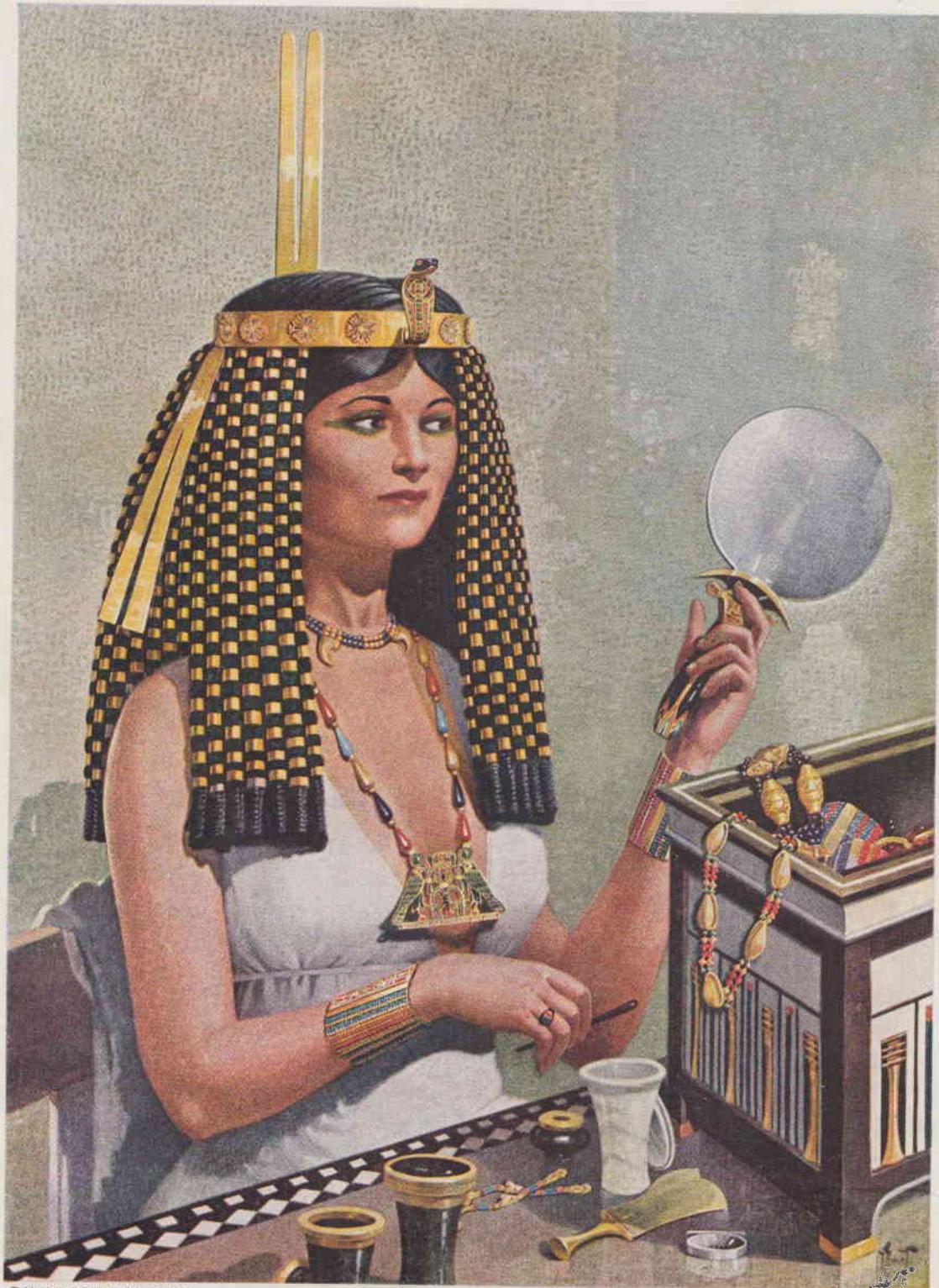
be followed by some acrobatic dancing, performed by the girls seen standing on the left of the crowd in the courtyard.

Next to the nomarch sits his wife, Hathor-hotpe, arrayed in her best and holding a rotating fan of colored matting. Thūty-hotpe, himself, wearing the distinctive robe and pectoral of a vizier, toys with an ivory handled flywhisk.

The Bedawīn, whose gaudy woolen mantles and crude possessions contrast sharply with the refined attire and accessories of their hosts, seem enthralled with the simple spectacle. Their enthusiasm is shared by the Egyptians in the courtyard, among whom are a number of local celebrities—notably the tall, scrawny herdsman, well known to students of ancient Egypt as "the thin man of Mîr".

The painted tombs of the great XIIth Dynasty lords of Middle Egypt at Mîr, Deir el Barsha, and Beni Hasan esh Shurûq, are veritable treasure houses of information for students of life in the Middle Kingdom. Most familiar to travelers are those at Beni Hasan, famed for the so-called "proto-Doric" columns of their rock-cut façades.

Though these columns, the shafts of two of which appear in our painting, superficially resemble the Greek Doric column, there is no real basis for the association, some 1300 years separating these from, for example, the Parthenon.



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Painting by H. M. Herget

"And His Majesty Loved Her Exceedingly"

The Princess Sit-Hathor-Yunet was daughter of King Se'n-Wosret II, sister of King Se'n-Wosret III, and aunt of King Amen-em-hét III. The Metropolitan Museum in New York possesses the greater part of the jewelry and other possessions of this lady. (Latter part of the XIIth Dynasty, about 1890-1840 b. c.)

A King's Daughter and Her Personal Possessions

WHEN, in 1887 B. C., King Se'n-Wosret II of the XIIth Dynasty died and was buried beneath his pyramid at El Lahûn, he left behind him, in addition to his son, Se'n-Wosret III, three daughters, the second of whom, Princess Sit-Hathor-Yûnet, outlived her brother and died in the reign of her nephew, King Amen-em-hêt III. As a favored relative of three great pharaohs, this petite and doubtless charming woman was well provided for. When, in February, 1913, the expedition of the British School of Archaeology in Egypt cleared her tomb beside the pyramid of her father at El Lahûn, they found in it a treasure of jewelry and other feminine equipment, which in beauty of design and refinement of execution has remained unsurpassed to the present day.

In our portrait we have caught the princess "making up" her eyes with black cosmetic contained in a small gold-mounted jar of polished obsidian, and applied with a slender ebony stick. Her silver mirror has a handle of obsidian, mounted with gold, electrum, carnelian, lapis lazuli, and green paste, and adorned with gold faces of the goddess Hat-Hor.

Sit-Hathor-Yûnet's jewelry is of gold, electrum, and silver, "molded and chased with microscopic accuracy" and cunningly inlaid with blue and green paste, carnelian, lapis lazuli, turquoise, amethyst, and garnet. The beads in her necklaces, girdles, and bracelets are of amethyst, turquoise, lapis, carnelian, and gold.

The pectoral, which Sit-Hathor-Yûnet wears, was a gift from her father, King Se'n-Wosret II, and bears

his cartouche in the center of its design. Her bracelets, as the inlaid inscriptions on their clasps show, were given her by her nephew, King Amen-em-hêt III.

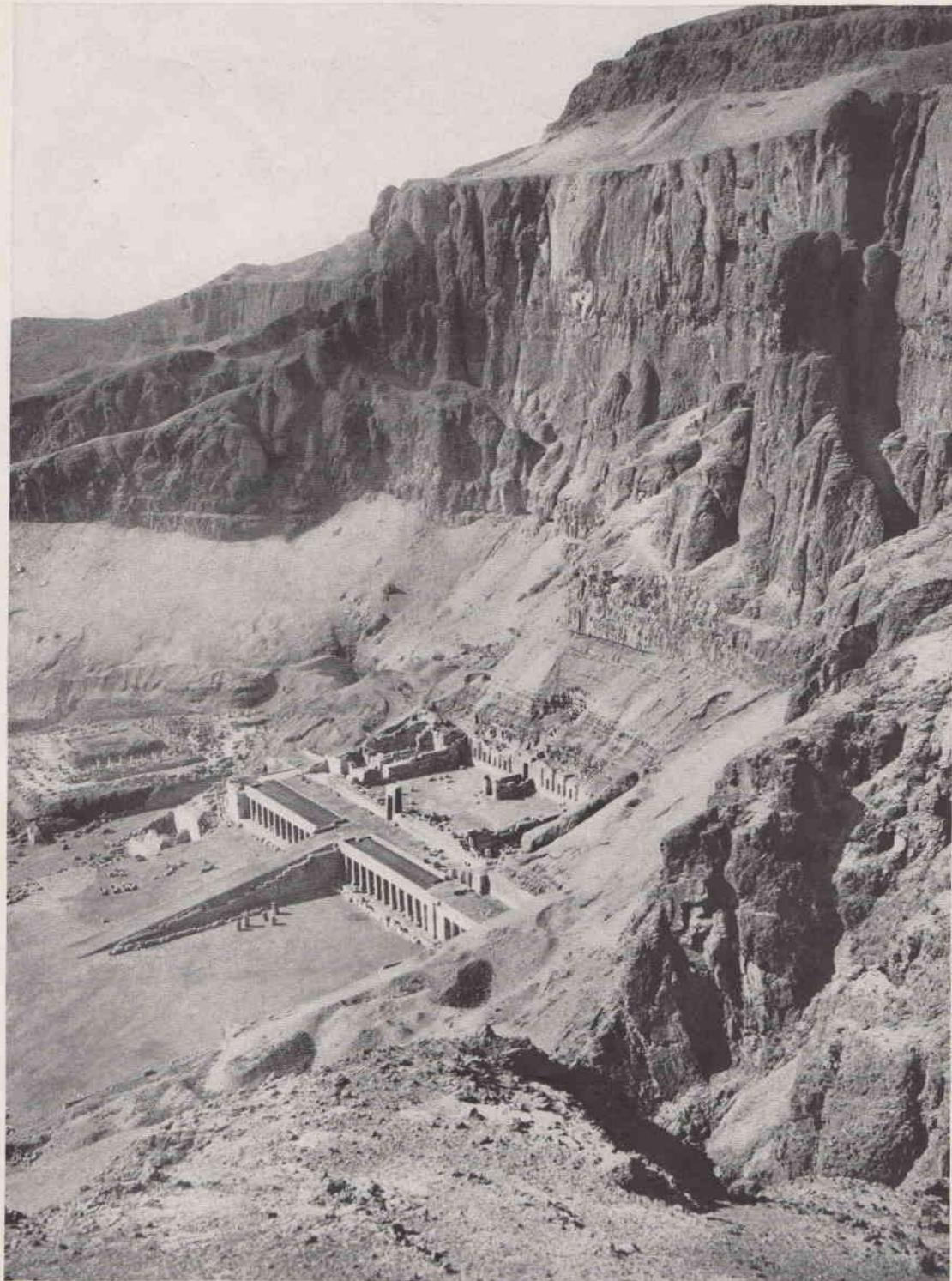
On the dressing table of the princess is the larger of her two ebony jewel caskets, paneled in ivory, gold, blue faience, and carnelian, and bound in gold and silver. Beside it lie a silver rouge dish, a bronze razor with gold handle, two bracelets of gold and semi-precious stones, an unguent jar of alabaster, and two others of obsidian, mounted with gold.

With this attractive representative of one of the greatest and most luxurious phases of Egypt's history we take our leave of "the Older Period".

Aided by our paintings, we have coursed lightly through some 11 millenniums of human development, 1,200 years of which fall within the period of recorded history. We have seen the Egyptian as a shaggy hunter of the Old Stone Age, roaming the gravel terraces of an incredibly ancient Nile. We have followed him through his long formative stage to his first high point in the Pyramid Age of the Old Kingdom.

We have seen him falter at the end of this period and rise again to new cultural and artistic heights in the Middle Kingdom. Beyond the stage represented by the ultra-sophisticated lady of El Lahûn it would seem impossible for him to go.

We have, however, not yet reached what many students regard as the full bloom of Egyptian culture—the New Kingdom. To this we turn in the second part of this article.



© Lehner & Landrock

Mighty Cliffs Back the Temple of Hat-shepsüt, Female "King" of Egypt

The ardent feminist is pictured in a more tender mood on page 486. On page 490 a priestly procession moves against the splendid background of the memorial to one of the first great women of history. But as one comes over the barren steeps from the Valley of the Tombs of the Kings at Thebes, this is the view of the colonnaded structure,

Daily Life in Ancient Egypt: *The Later Period*

WITH the passing of the XIIth Dynasty in 1788 B. C. the Middle Kingdom, the second great period of Egyptian history, came to an end.

During the reigns of the feeble kings of the XIIIth Dynasty of Thebes and those of the apparently contemporary XIVth Dynasty of Xois in the Delta, political, economic, and cultural conditions in the country went from bad to worse. About 1730 B. C. Egypt was subjected for the first time in its recorded history to the indignity of a foreign overlordship.

The northern part of the country was seized by the princes of an Asiatic people, or group of peoples, known to us as the Hyksos. From their fortified capital at Avaris in the northeast Delta, these foreigners ruled the whole of Lower Egypt and exacted tribute from the native rulers of the south.

The Hyksos Introduce the Horse

Since many of the important changes in the life and culture of the Egyptians of the New Kingdom, as contrasted with those of the Old and Middle Kingdoms, can be attributed, either directly or indirectly, to their contact with the Hyksos, it will be useful to summarize briefly what little we know of this intensely interesting people.

The name "Hyksos" appears to have been derived from the title *hekau khasut*, "Princes of the Uplands," applied by the Egyptians to the sheikhs, or tribal leaders, of these foreigners.

Traces of the Hyksos occur in Egypt as early as 1900 B. C., and their seizure of the country in the late 18th Century B. C. seems to have been the result of the rise to political power of a foreign element long resident in the land, rather than of a sudden invasion from without.

The origin and race of the Hyksos are still unsolved problems, but it is clear that they were basically of Semitic stock and that they filtered into Egypt from Palestine, which for several centuries was their home, or at least their base of operations. They were both warlike and highly civilized, expert metallurgists, makers of fine pottery, and builders of well planned and efficiently fortified towns.

They were the first people with whom the Egyptians came in close contact who knew and used the horse, and they were undoubtedly responsible for the introduction of this enormously important animal into Egypt.

For more than a century two successive lines of Hyksos kings, the XVth and XVIth Dynasties, exercised authority over the country, with only mild resistance from their vassals,

the Egyptian rulers of Thebes. Shortly before 1600 B. C., however, the weak XIIIth Dynasty having given place in Upper Egypt to the much more vigorous XVIIth Dynasty, these native "Princes of the Southern City" began to fight back in earnest.

In the time of the Hyksos king Apōpy III the Theban Seken-en-Rē' Ta'o II was slain in a battle against the foreigners, the crushed head and mutilated body of his mummy attesting the violence of his death.

Ta'o's elder son, King Wadj-kheper-Rē' Ka-mosē was more successful. Rallying his vacillating henchmen, he besieged and captured the hostile town of Neferūsi in Middle Egypt and inflicted several other serious reverses on the Hyksos armies.

Ka-mosē's younger brother and successor, King Nebpehty-Rē' A'ḥ-mosē, finished the job, destroying Avaris after a long seige and driving the Hyksos back into Palestine. There for some years he continued to harry them and sack their towns.

Thus, with A'ḥ-mosē I, the founder of the XVIIIth Dynasty, Egypt in 1580 B. C. once more became an independent and powerful nation and embarked upon those centuries of glorious achievement and high civilization which we know as the New Kingdom.

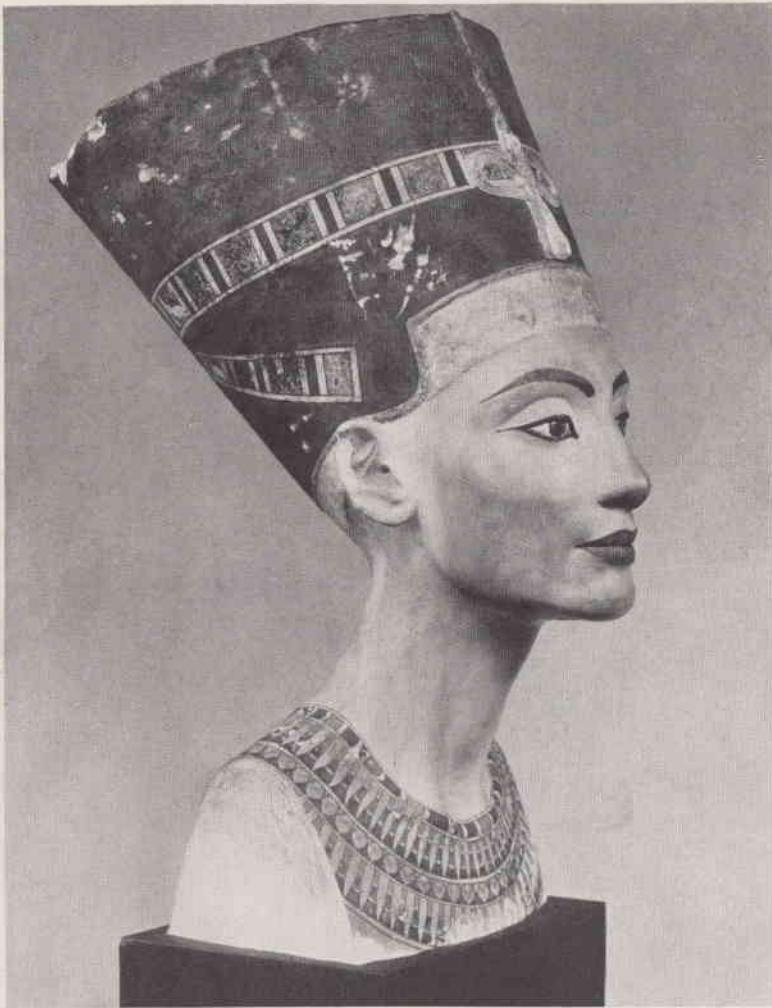
Egypt Becomes a Great Empire

The considerable plunder which A'ḥ-mosē I brought back from his raids on the Hyksos cities in Palestine aroused in the Egyptians a lust for conquest. Recent years of practice in the art of war and the possession of a well armed, well trained and highly mobile army now enabled them to gratify this desire.

No longer content with simply policing their northern and southern boundaries, the kings of the XVIIIth Dynasty campaigned farther and farther into both Asia and Africa. At the death of A'ḥ-mosē's great-great-grandson, Thut-mosē III, Egypt controlled and levied tribute on an empire which stretched southward to the Fourth Cataract of the Nile and northward to the farther shore of the Euphrates.

In addition to the vast wealth in slaves, animals, raw materials, and finished articles, an immense supply of gold poured into the Nile Valley. It was drawn as tribute from provinces and vassal states and extracted in a steady stream from the rich and constantly worked royal mines in Nubia.

Gold now became the outstanding medium of barter. By controlling the bulk of the gold supply of the then known world, Egypt was able for centuries to hold the balance of power among the nations of the Near East and to



Metropolitan Museum of Art

Nefret-ity, of Graceful Beauty, Had a Mind of Her Own

When priestly pressure caused Akh-en-Aten to be false to his name, his pretty wife, here pictured, forsook her husband and remained true to "the living Aten," symbolized by the sun. The life-size limestone bust from which this cast was made was found at Tell el-'Amârneh (El 'Amârna).



Metropolitan Museum of Art

Egyptians Accepted, but Seldom Rode, the Horse

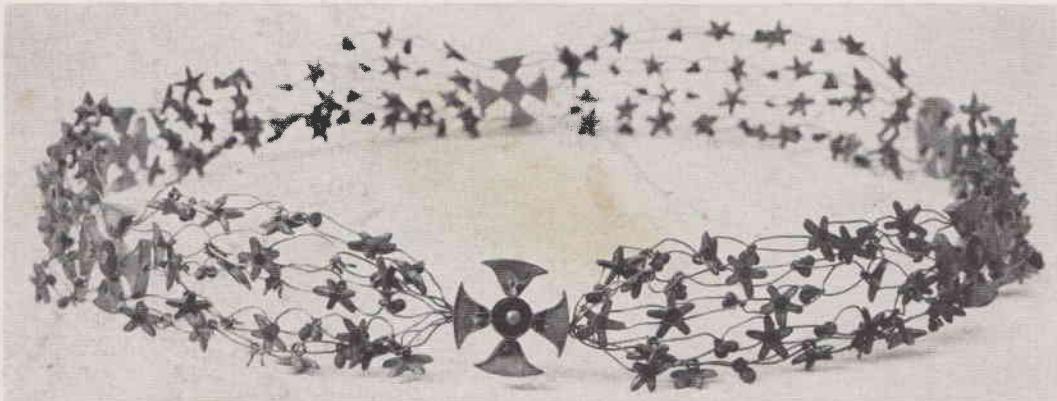
About a century after the Hyksos introduced the animal into Egypt, this painted wooden statue—now in the Metropolitan Museum of Art—was made. Pharaohs are pictured riding in chariots but this groom goes astride his mount to the royal stable (page 484).



Menena's Ancient Tomb at Royal Thebes Is Still a Happy Hunting Ground

Metropolitan Museum of Art

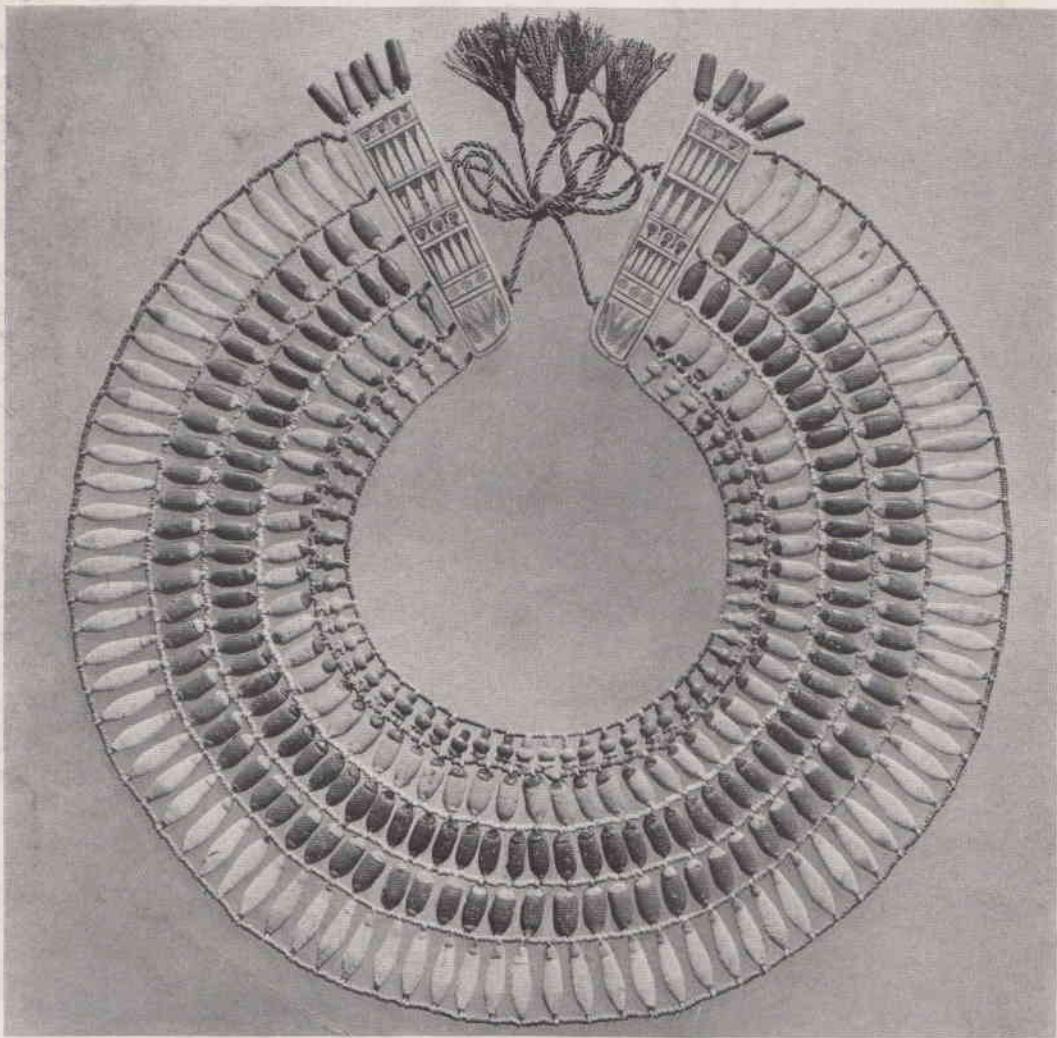
In the wall decorations which pictured his life, and so continued it beyond the grave, the "Scribe of the Fields" surveys his lord's property, prays to Osiris, and welcomes his relatives. But he is also pictured decoying ducks to his boomerang while his wife, with an armful of lotus flowers, admires his skill. Beyond the papyrus hedge the official spears fish while his daughter steadies his stance with a protecting hand. The paintings retain their perfect color after about 3,500 years.



Metropolitan Museum of Art

Princess Khenmet Wore This Circlet 3,800 Years Ago

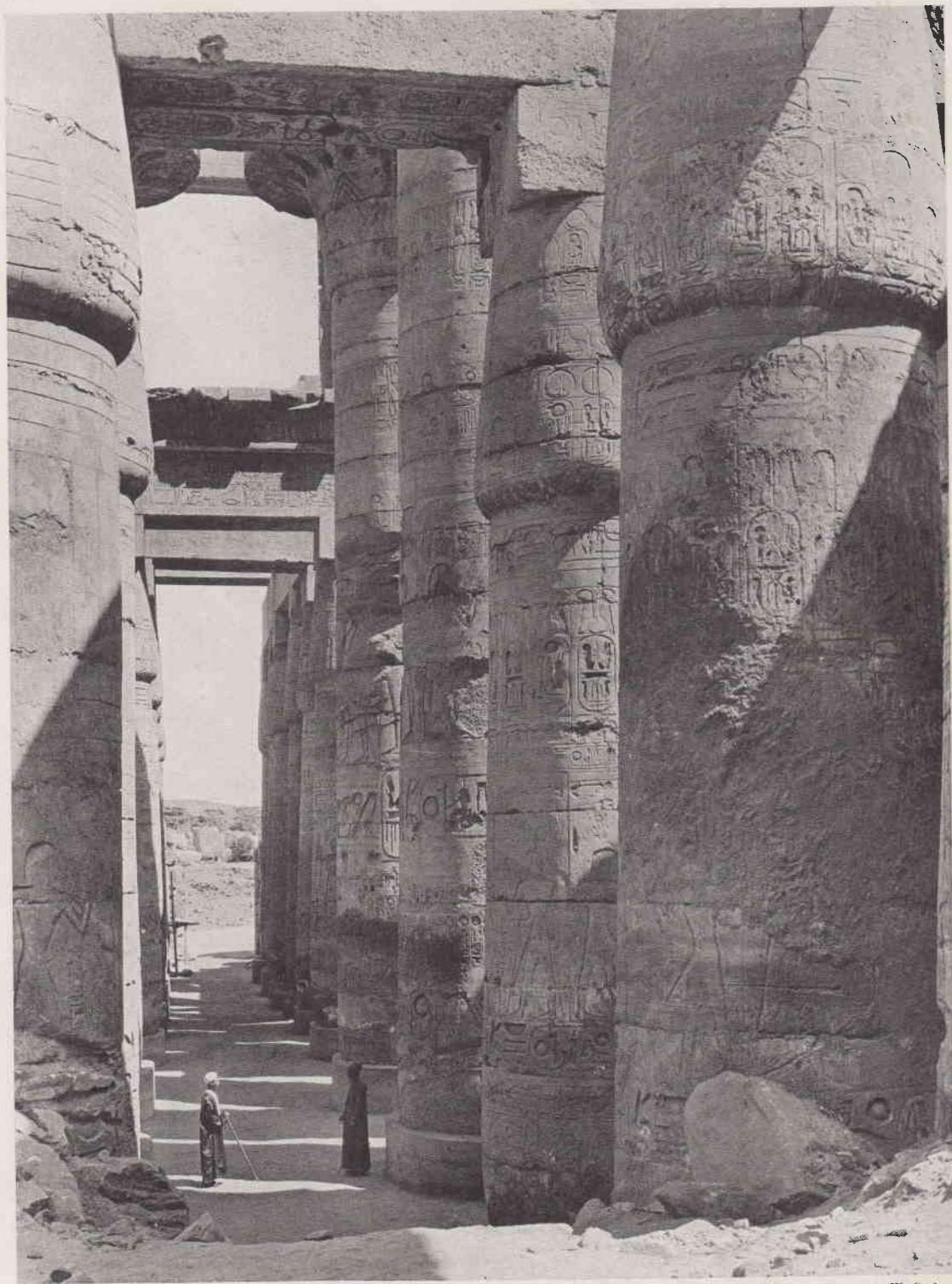
Tiny blossoms are strung on gold wire, inlaid with green feldspar and carnelian between larger lotus flowers.



Metropolitan Museum of Art

Fruits and Flowers of Glazed Frit Formed the Costume Jewelry of 1386-1356 B. C.

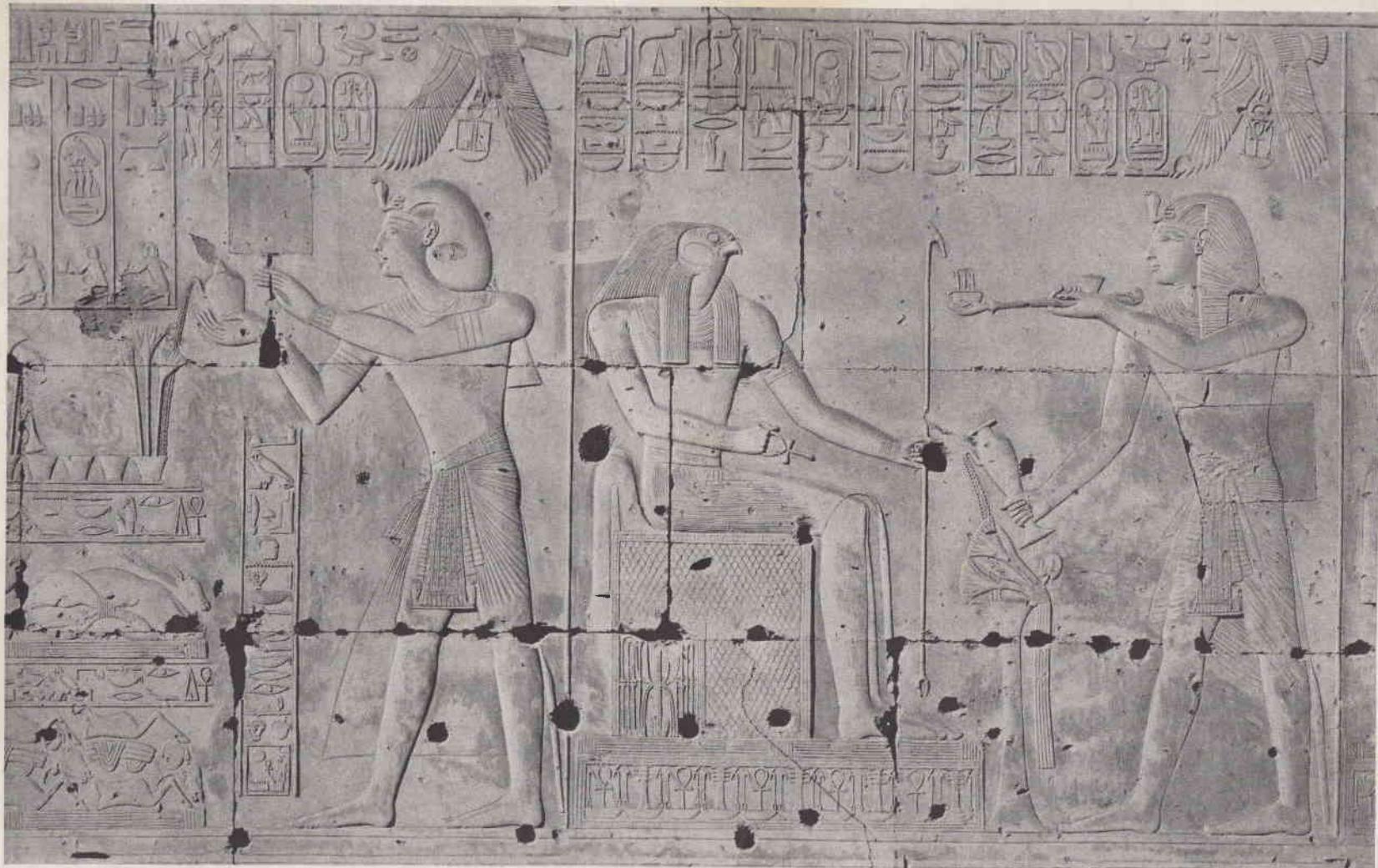
A fine example of such modest decoration is this bead broad-collar in red, yellow, blue-gray, and white.



A. W. Cutler

Beyond Lesser Pillars in the Hypostyle Hall at El Karnak Loom Huge Shafts

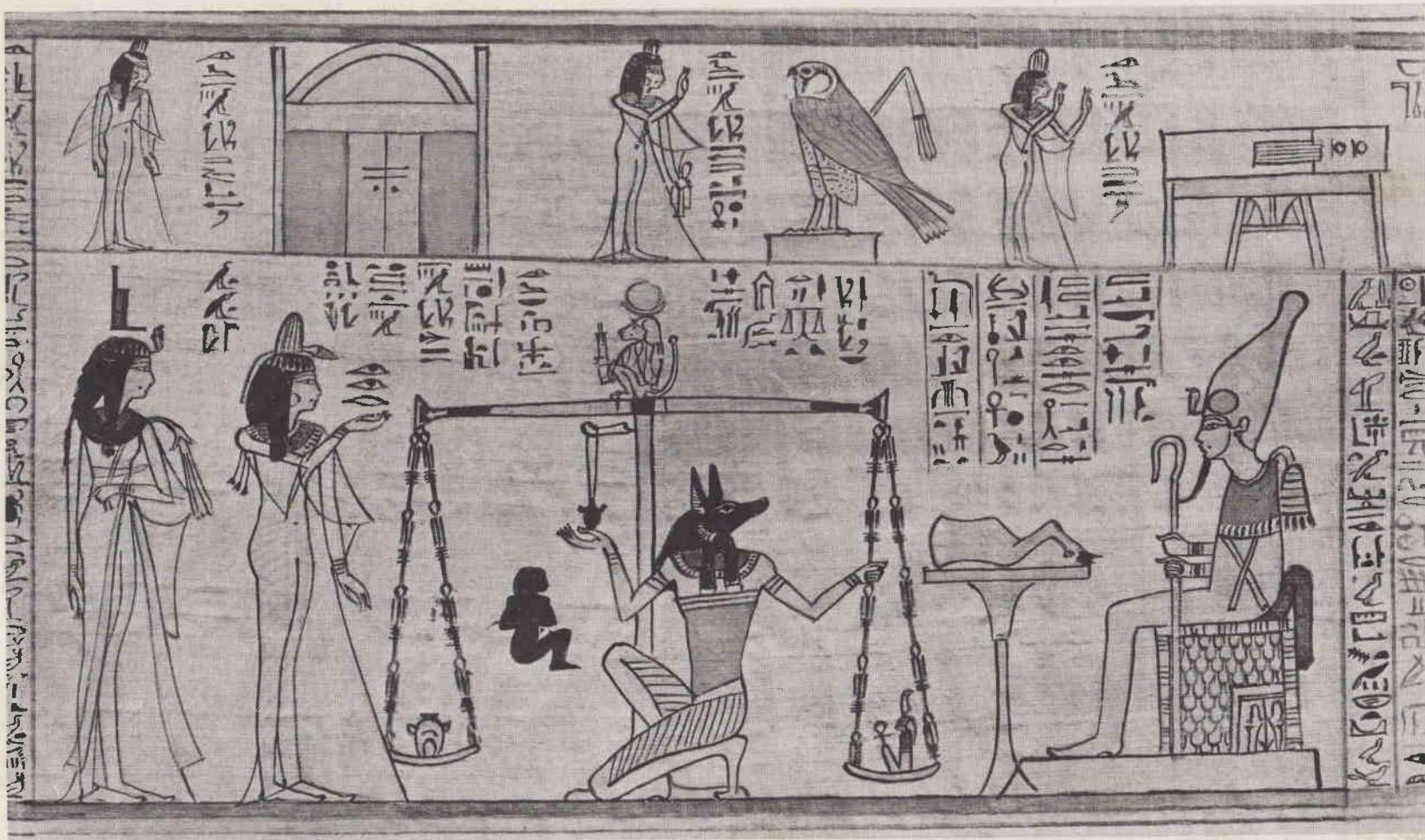
Every one of the 12 columns flanking the central aisle of Thebes' greatest temple supports an enormous open capital. Two of these are visible (upper left) just behind the crosspiece of the first arch. On the tops of these 70 feet above the ground a regiment could stand, a hundred soldiers to each platform.



Metropolitan Museum of Art

With Incense and Libations, King Sethy I Wins the Favor of Falcon-headed Sokar, God of the Underworld

On the fine-grained limestone walls of the ruler's temple at Abydos, Egyptian low-relief sculpture appears at its best. Just below the double cartouche, showing his throne and personal names and with vulture-headed Nekhbet protecting him with her wings, the pharaoh pays his tribute. The hieroglyphs over the head of the god mean "I give thee all strength; I give thee all power." In his right hand the deity holds the *Ankh*, or sign of life; in his left the *Was*, scepter of "well-being."



Metropolitan Museum of Art

Now a Museum Piece in New York, This Papyrus Was Princess Entiu-ny's Open Sesame through the Underworld

Once the spells forming the Book of the Dead were painted inside the coffin. In the New Kingdom, they were inscribed on a papyrus roll and buried with the mummy. Here before Osiris, judge of souls and god of the deceased, the dog-headed Anubis weighs the heart of the candidate against a figure symbolizing truth. Behind the slender princess in her diaphanous gown stands Isis, sister of Osiris.



Metropolitan Museum of Art

Sethy's Well Preserved Mummy Survived Adventures Worthy of the Living Pharaoh

Buried in 1298 B. C. in the finest of the tombs of the Kings at Thebes, it was plundered, recovered, reburied, found by peasants, and finally rescued for the Egyptian Museum at Cairo. This king invaded Asia Minor, repulsed the Bedouin, fought at Armageddon, and took Tyre. Having signed a treaty with the Hittites, he devoted himself to peace and the arts. His battle reliefs are among the most imposing of those which have survived.

maintain her dominant position long after she had lost those sturdy virtues through which she had achieved this position.

Even more influential than these material riches in molding the character of the New Kingdom was the host of new ideas with which Egypt's political expansion brought her into contact. Though conservative to the end and ever reluctant to alter its traditional mode of existence, "the land watered by the Nile" nevertheless became in the centuries following 1600 B. C. less and less an isolated African community and more and more a component

part of the eastern Mediterranean world.

Into the art of Egypt there creep those graceful and vivacious forms and concepts which we recognize as characteristic of the pre-Greek peoples of the islands and littorals of the Mediterranean. Semitic cults and the at least superficial effect of contact with Semitic modes of religious thought appear in the Egyptian religion.

It was, however, in the realm of cultural improvements of a more practical nature that Egypt's debt to her more inventive neighbors to the north and northeast was greatest.

The Pharaoh Was an Absolute Ruler

There can be no doubt that such New Kingdom innovations as defensive body armor, the compound bow, the scimitar and the long sword, the wheeled vehicle, and the well-sweep—the first and only piece of irrigation machinery used by the dynastic Egyptians—were direct importations from Asia.

Over this new, opulent, and highly cosmopolitan state, in which numerically the foreign population of slaves, artisans, mercenary soldiers, and merchants bulked almost as large as the native Egyptians, the pharaoh ruled in absolute power, surrounded by his bodyguard of picked troops and his coterie of royal favorites.

The landed nobility, so prominent in the Middle Kingdom, had been completely suppressed, and their place taken by an army of officials of the crown. At the head of these, directly under and responsible to the king himself, there were now two viziers, one for

Upper Egypt and one for Lower Egypt, and two chief treasurers, whose reports to the monarch were important features of the daily administrative routine.

The southern vizier, the more powerful of the two, in addition to his functions as chief magistrate and head of the judiciary branch of the government, also controlled the vast estates and personnel attached to the service of the new chief god, Amūn. Except for that granted by royal decree to the god, all land was the property of the crown, and was worked by the king's serfs or was bestowed "as a favor of the king's bounty" on his officials.

The principal government activities, in which every citizen played a part, either voluntarily or by compulsion, included, in addition to the almost yearly military campaigns, the exploitation of quarries and mines, the opening of trade routes through the deserts, the excavation of waterways and irrigation canals, and the erection of new and, as time went on, increasingly stupendous public buildings.

The chief beneficiary of the pharaohs' extensive building operations was the god Amūn of Thebes. As patron of the nation's new capital and the special divinity of Egypt's ruling family, this deity had risen to unchallenged supremacy.

The temple of Amūn at El Karnak (page 512)—to name only the principal "house of the god"—is in itself a monumental history of the New Kingdom and the Late Dynastic Period, for there was scarcely a king of Dynasties XVIII-XXX who failed to enlarge or embellish this greatest of shrines. To the service of this and the numerous other temples of the god



Staff Photographer Maynard Owen Williams

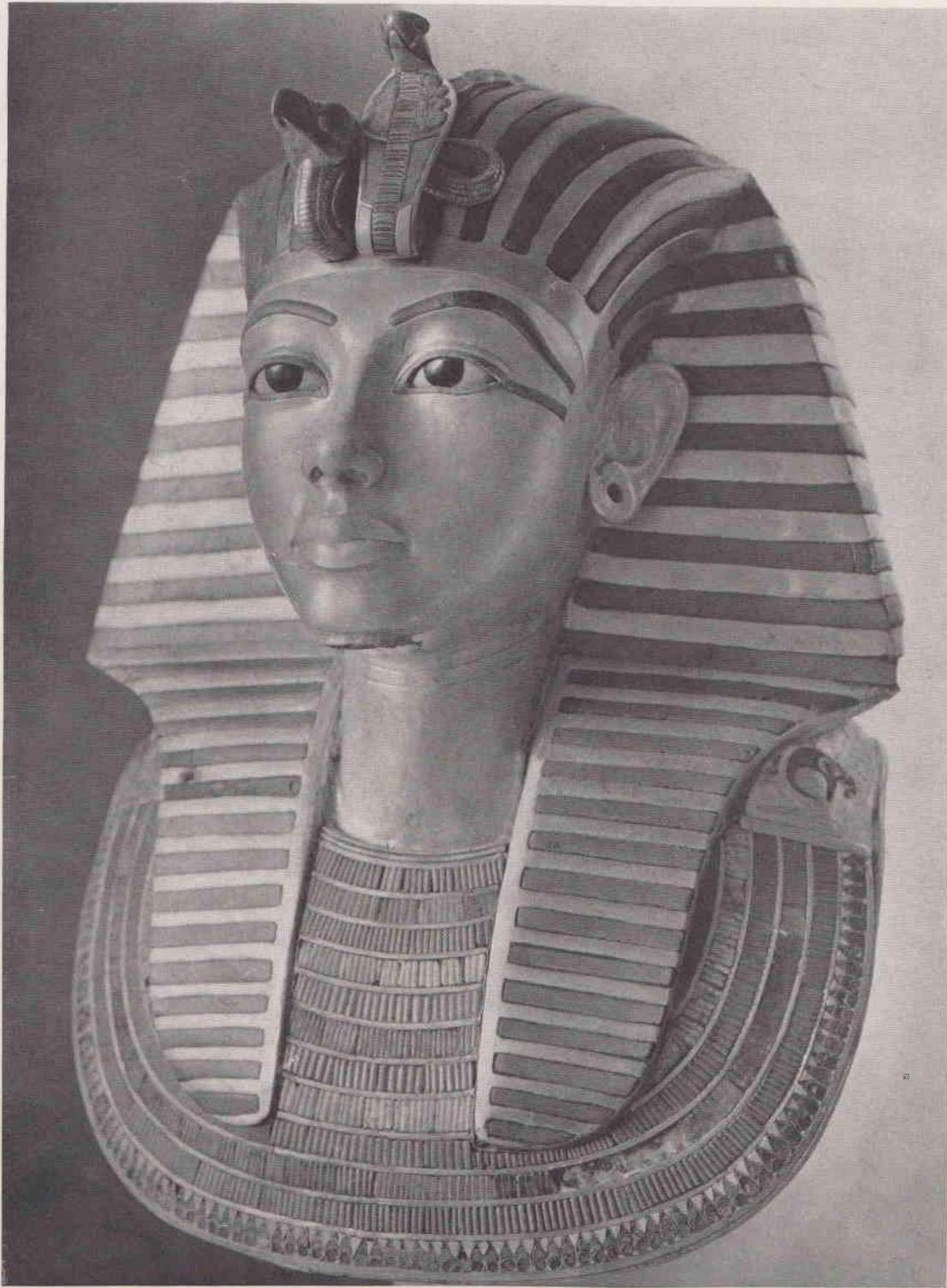
Checked against His Mummy, This Superb Statue of Thut-mosé III Proved to Be a Faithful Portrait

Though forced for twenty years to submit to the will of Hat-shepsüt, his aunt and co-regent, he came to be one of the greatest of the Pharaohs. Victor in many campaigns, he showed a streak of littleness by masking the inscribed bases of Hat-shepsüt's obelisks with brick walls and obliterating, so far as possible, her name and memory from the rolls of history.

there was diverted much of the nation's wealth in gold, lands, serfs, and cattle.

The priesthood of Amūn, as time progressed, absorbed more and more of the country's manhood, and the administration of the god's huge estates required a host of stewards, treasurers, overseers, and scribes almost as numerous as those in the employ of the king.

As was the case with the preceding periods of Egyptian history, our knowledge of life in the New Kingdom is derived largely from the contents and the decorated walls of the tombs of the dead. At Thebes, where the majority of the great personages of the New Kingdom



Metropolitan Museum of Art

Tut-ankh-Amun's Burial Mask Has Been Shorn of Its Kingly Beard

Above his forehead are the royal insignia of vulture and serpent. A solid gold coffin (page 479) one-eighth of an inch thick sheathed the masked mummy. Outside that were two wooden cases overlaid with gold, a rose-granite sarcophagus, and four shrines, the outer one 17 feet long, 11 feet wide and 9 feet high.

were buried, the tombs were rock-cut in the sides of the precipitous cliffs that border the Nile Valley throughout Upper Egypt.

The maṣṭabeh tomb disappeared, and the pyramid, no longer the special prerogative of the royal dead, was greatly reduced in size and relative importance.

Deep into the western cliffs at Thebes winds a long and tortuous valley, its boulder-strewn way ending in a secluded natural amphitheatre. Here, far from prying eyes, King Thut-mosē I about 1520 B. C. had his architect Ineny excavate for him a secret tomb.

The job was done, as an inscription in Ineny's own tomb tells us, with "no one seeing, no one hearing"—which may possibly mean that "dead men tell no tales," for it must have required a considerable gang to excavate and clear the underground passages and chambers of the tomb. After the royal burial the small and simple entrance way, nestled against the base of the precipitous rock wall, was filled in with débris and thus obliterated from view.

The example of Thut-mosē I was followed by his successors, the kings of the XVIIIth, XIXth, and XXth Dynasties; and the deserted bay in the western cliffs became what we now know as the Valley of the Tombs of the Kings, a site familiar as the resting place of Egypt's royal dead.

Funerary beliefs were now dominated by magic, as typified by a series of spells, designed to assure the comfort and well-being of the deceased in the world beyond the tomb, and known collectively as the "Book of the Dead". Exemption from the penalties likely to be exacted for a not altogether blameless existence could be purchased, and the morality of the individual and the nation suffered accordingly.

This and the other unhealthy conditions latent in the new order of things, however, did not seriously affect the unparalleled prosperity of the country until after the fall of the second of the great dynasties discussed on pages 484-515, the XVIIIth (1580-1320 B. C.) and the XIXth (1320-1205 B. C.).*

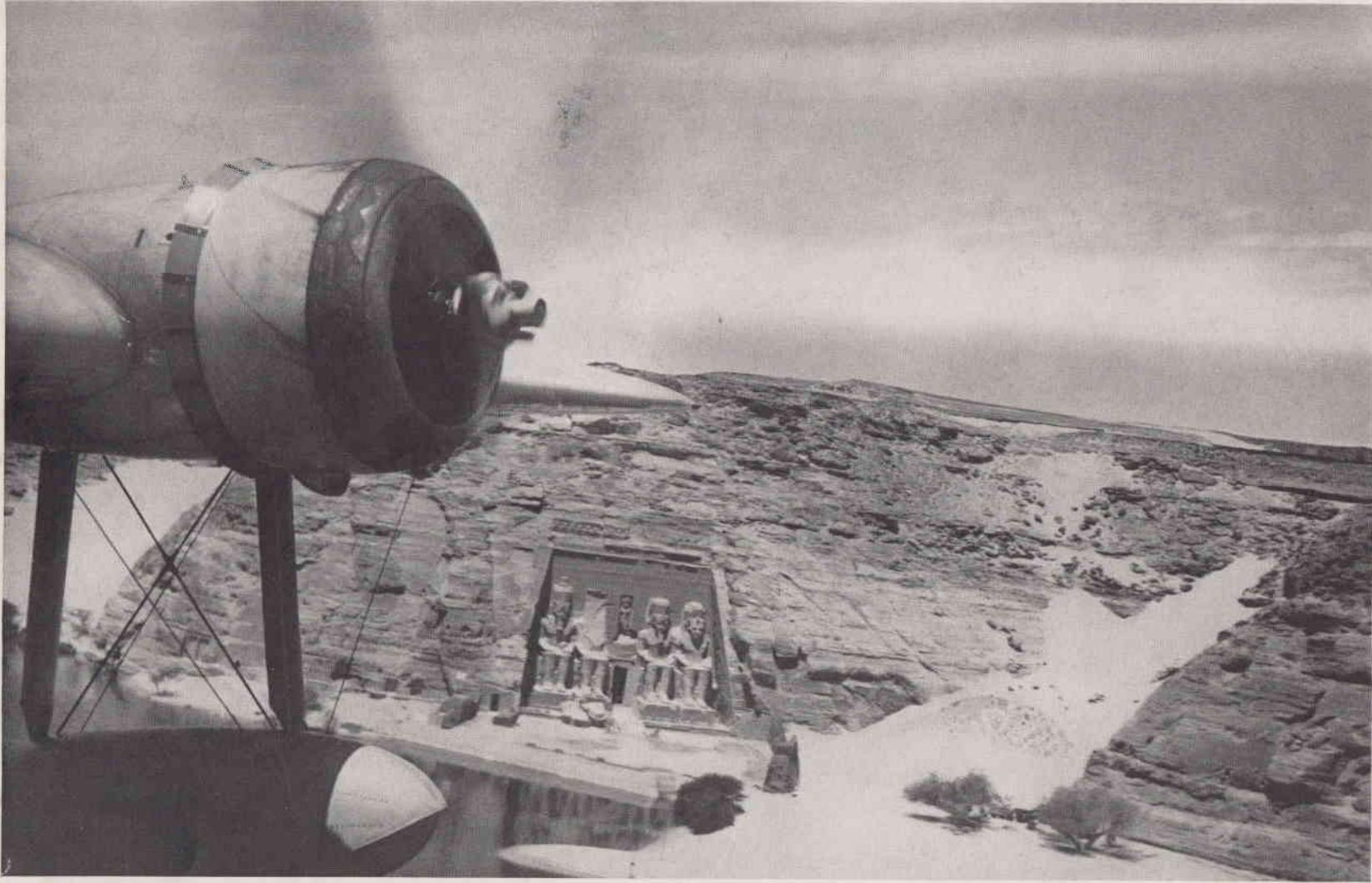
* See other richly illustrated articles in NATIONAL GEOGRAPHIC MAGAZINE: "By Felucca Down the Nile," by Willard Price, April, 1940; "Crossing the Untraversed Libyan Desert," by A. M. Hassanein Bey, Sept., 1924; "East of Suez to the Mount of the Decalogue," by M. O. Williams, Dec., 1927; "Flying Over Egypt, Sinai, and Palestine," by Brig. Gen. P. R. C. Groves and Maj. J. R. McCrindle, Sept., 1926; "Land of Egypt: A Narrow Green Strip of Fertility Stretching for a Thousand Miles Through Walls of Desert," by Alfred Pearce Dennis, March, 1926; "Resurrection of Ancient Egypt," by James Baikie, Sept., 1913; "The Tomb of Tutankhamen," by M. O. Williams, May, 1923; "Under Egypt's Golden Sun," by B. Anthony Stewart, April, 1940.



Metropolitan Museum of Art

Tut-ankh-Amūn's Mummy Lay under
Wings of Gold Cloisonné

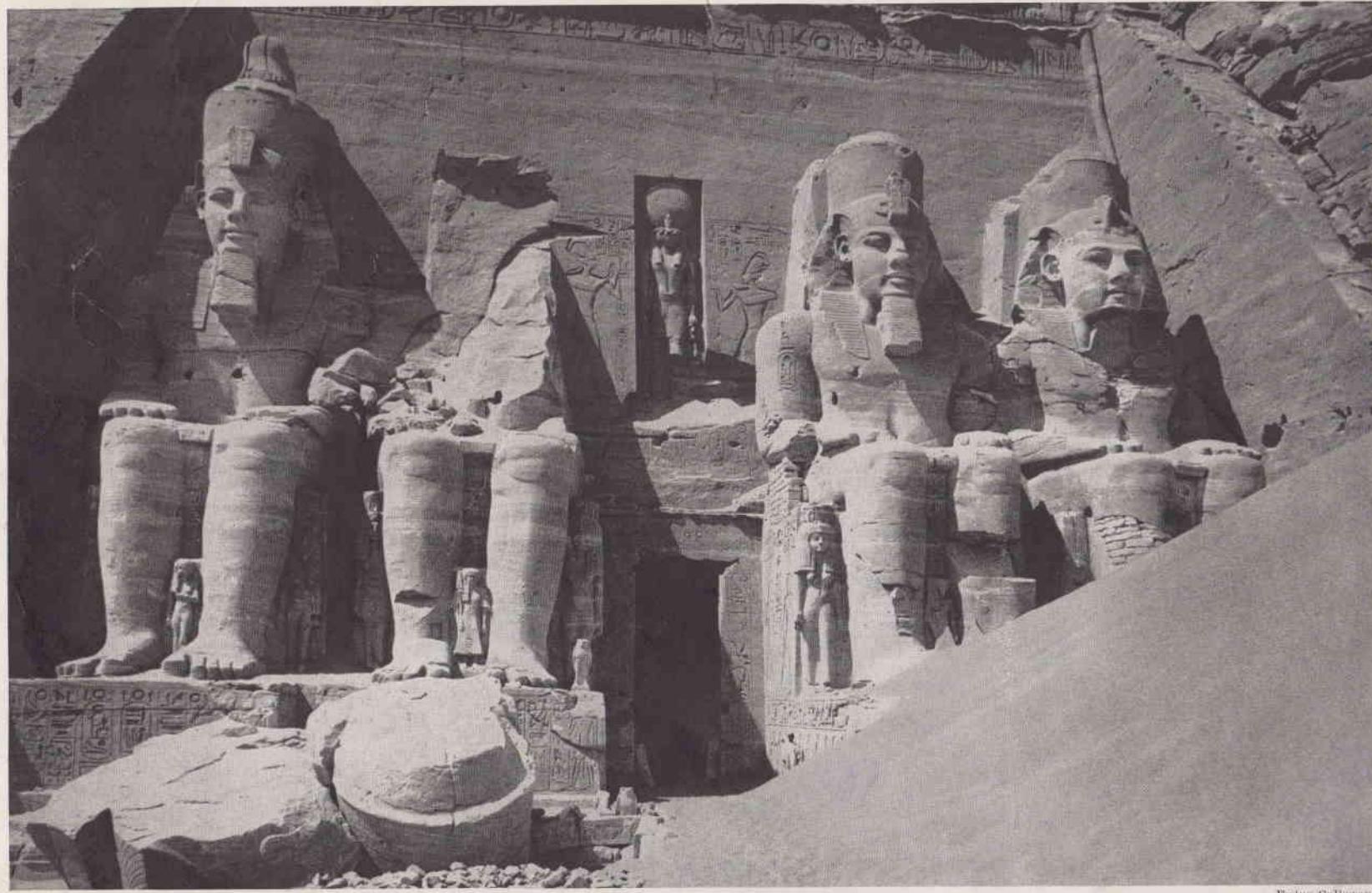
Innermost of three coffins was this golden shell. The head-dress vulture is Nekhebet, goddess of Upper Egypt; the cobra Buto, goddess of Lower Egypt.



The Colossi of Ramesses at Abû Simbil Look Their Best from the Air

Imperial Airways, Ltd.

The visitor on foot, staring up at the 65-foot statues, finds the Pharaohs' knees stricken with elephantiasis, the royal heads remote. But as the plane circles north over the Nile to give left-side passengers a look, the carvings have better perspective. The figures' pose seems designed for the flyer, not the Nile sailor.



Wife and Children, More Than Life Size, Are Calf-high-figures on the Ramesses Colossi

Ewing Galloway

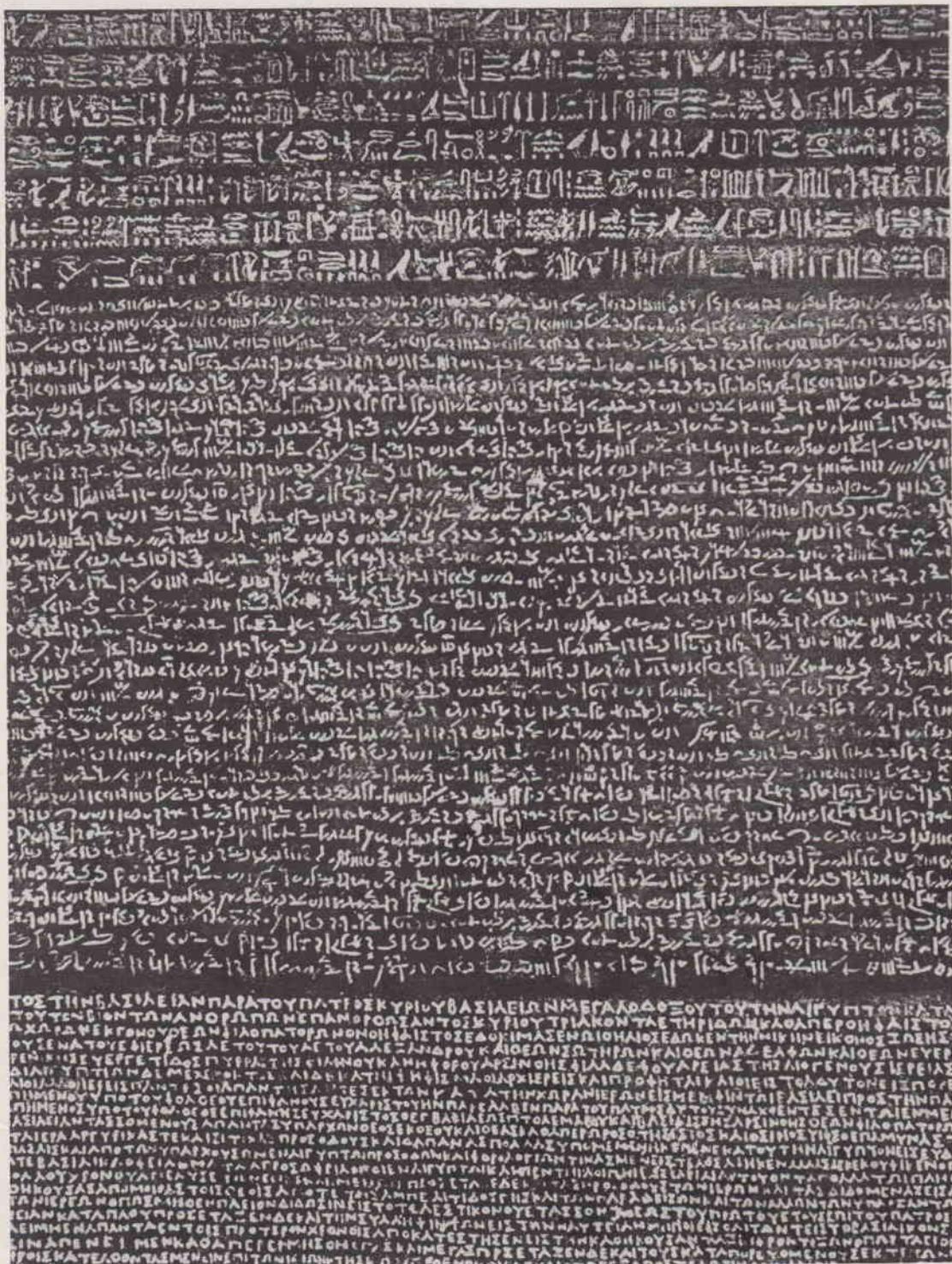
Between the ankles of the headless statue stands Prince Amun-her-khepesh-ef (page 482). Dwarfed though it is by the colossus, it is taller than a man. In a niche above the doorway is a statuary rebus, making up the king's name. The temple chamber penetrates 150 feet into the living rock.



Metropolitan Museum of Art

A Tiny Son Clings to the Accordion-pleated Kilts of Egypt's "Great" Pharaoh, Ramesses II

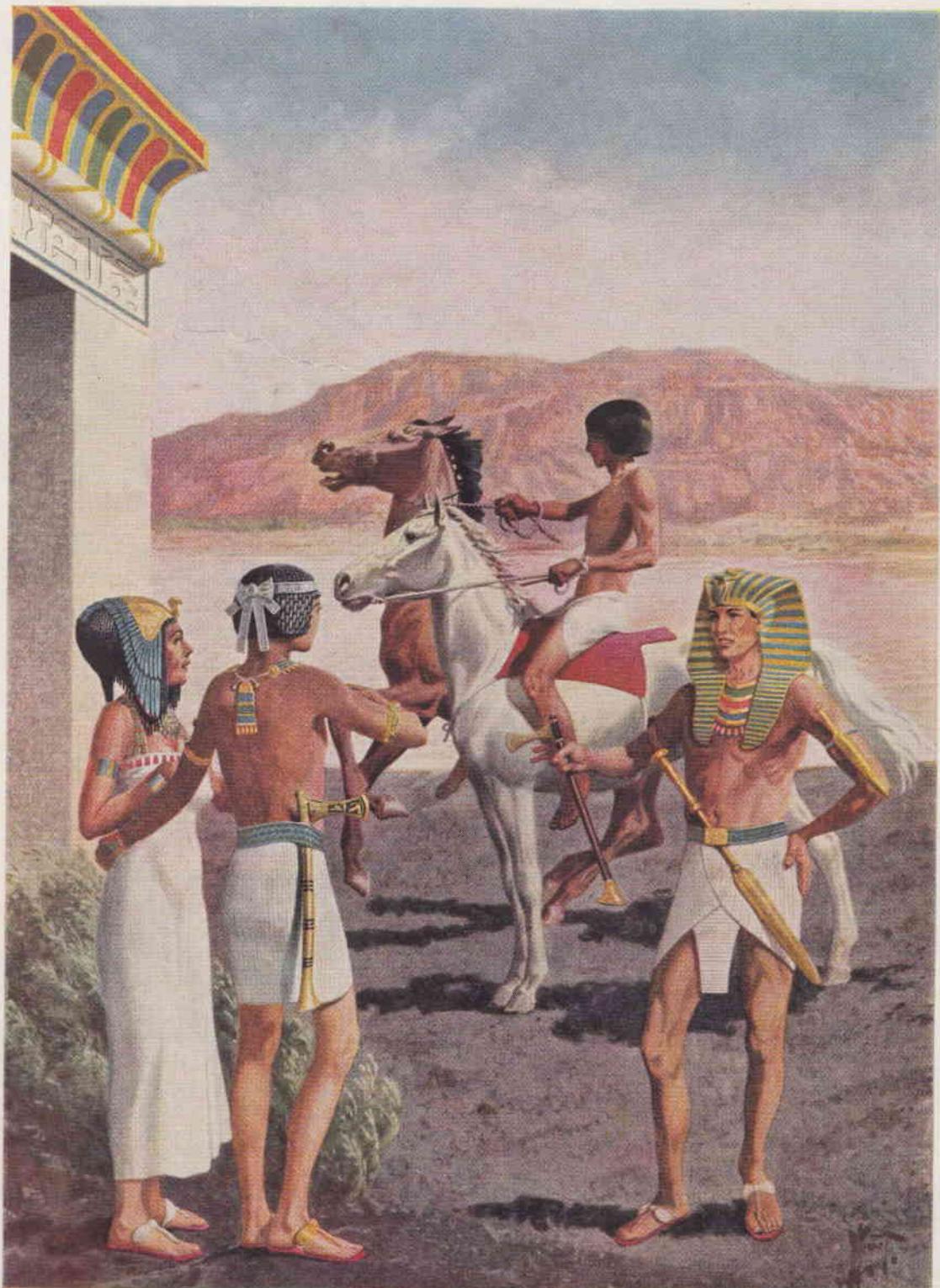
On forests of granite obelisks and acres of war-like temple carvings, the ruler boasted of his might. But in this black granite statue, now in Turin, the authority of the shepherd's crook, symbol of power, modified by a tightly gripped handkerchief, and fine linen gives a foppish touch to the war helmet.



© British Museum

Best Clue to the Language of the Ancient Egyptians Was the Rosetta Stone

About 193 B.C. a 15-year-old Pharaoh was supported by the priests of Memphis. Their decree was inscribed in three forms (top to bottom); the sacred writing or hieroglyphics of the priesthood; the demotic writing of the demos, or people; and the Greek, which was a common tongue of the eastern Mediterranean. In A.D. 1799 one of Napoleon's officers found the basalt block while digging trenches.



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Painting by H. M. Herget

"The Entire Land Shall Acclaim Me the Victorious Ruler within Thebes"

"Ka-Mosé, who protects Egypt," the last king of the XVIIth Dynasty, with his brother, A'h-Mosé, the founder of the XVIIIth Dynasty, and their grandmother, the dowager queen Teti-sheri, inspects a team of chariot horses. (Beginning of the New Kingdom, about 1590 b. c.) See page 423.

The Founders of the New Kingdom

A PAUSE in his successful campaign against the Hyksos has given the Pharaoh Ka-mosé an opportunity to return to his capital and enjoy a brief reunion with his family. Against a background formed by the Nile and, in the distance, the well known cliffs of western Thebes, we find the warrior king discussing with his younger brother, Prince A'ḥ-mosé, and his grandmother, Queen Teti-sheri, the merits of a team of horses, destined for the royal stables.

The Egyptians, thanks to the example set them by the enemy, had recently begun to import these hitherto unknown animals from Asia and to use them with epoch-making results in the newly inaugurated chariot division of the army—a branch, which through its mobility and its deadly efficiency was soon to help transform the naturally peaceable inhabitants of the Nile Valley into world conquerors.

Our portrait of King Ka-mosé is taken from his man-shaped coffin, unearthed at Thebes in 1857. The elements of the armlet which the Pharaoh wears on his right arm—a cartouche flanked by a pair of small gold lions—were found among the wrappings of his badly decayed mummy. A poniard with a silver handle of the old lenticular pommel type was tied on the left arm of the mummy in Nubian fashion.

The dagger actually shown in Mr. Herget's painting, also the property of Ka-mosé, is of Hyksos design, as is also the bronze war axe which the king holds in his right hand. The

most interesting of Ka-mosé's weapons is his two-handed sword, its bronze blade inscribed with the king's names and titles, its handle delicately inlaid in gold.

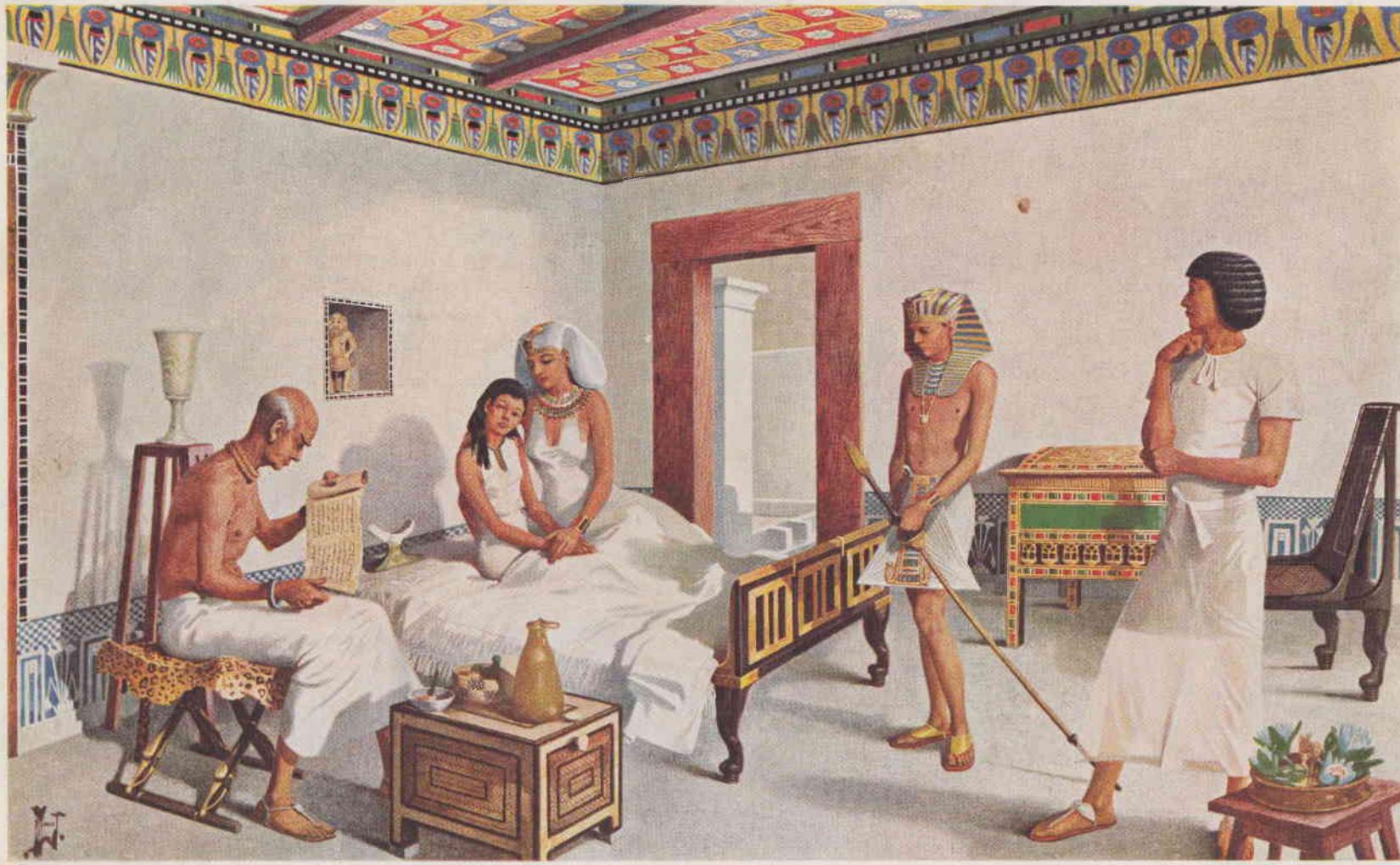
The weapons and jewelry worn by Prince A'ḥ-mosé are the most famous products of Egyptian minor art of the early New Kingdom. With the exception of the inlaid silver diadem, all are from the burial of A'ḥ-mosé's mother, Queen A'ḥ-hotpe, discovered at Thebes in February, 1859.

The axe, of copper with a cedar handle, is completely overlaid with gold and electrum, the blade adorned with designs inlaid in carnelian, turquoise enamel, and lapis lazuli.

The figure of the griffin appearing on the blade is a Helladic motif, borrowed directly from the island of Crete, with which Egypt at this time maintained close and friendly relations. There is, indeed, some evidence of a military alliance between the two nations, directed against their common enemy, the Hyksos.

Teti-sheri—"Little Teti"—we know chiefly from a statue in the British Museum, which represents her, not as we see her in the company of her distinguished grandsons, but as a fragile, charming girl, newly married to their grandfather, Prince Ta'o I.

During her long life Queen Teti-sheri played an important rôle in the varying fortunes of her husband, sons, and grandsons, and, revered and beloved, "lived to see Thebes transformed from a little provincial court into the capital of a great empire."



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Painting by H. M. Herget

"I Reared Her Eldest Daughter, the King's Daughter, Neferu-Re, While She Was a Child"

The young princess Neferu-Re lies ill in her bedroom in the royal palace at Thebes, attended by her mother, Queen Hat-shepsut, her half-brother, King Thutmosé III, and her tutor, Sen-Mut, the great Steward of Amun. At the left, the royal physician is consulting his medical papyrus preparatory to mixing a remedy from the ingredients on the inlaid casket before him. Through the doorway at the right can be seen part of the bathroom with its limestone bathing slab and screen. (XVIIIth Dynasty, joint reign of Hat-shepsut and Thut-mosé III, 1501-1480 B. C.)

The Family of King Thut-mosé I

ABOUT 1520 B. C. Thut-mosé I, king of Egypt and grandson of A'ḥ-mosé I, died and left as his heirs his son, Thut-mosé II, born to him by one of his secondary wives, and his daughter, Hat-shepsüt, the child of his queen.

To strengthen his right to the throne, Thut-mosé II was married to his brilliant and strong-willed half-sister, and for 18 years the two ruled the country as king and queen. Two daughters, Neferu-Rē' and Meryet-Rē' Hat-shepsüt, were born to the couple.

Thut-mosé II's only son, Thut-mosé III, had the misfortune to be the offspring of a harīm girl, named Isis. At his father's death in 1501 B. C. this boy, ten or twelve years old at the time, inherited the throne and the full titles and regalia of kingship.

However, as the courtier Ineny astutely observed, it was "the God's Wife, Hat-shepsüt, who managed the affairs of the Two Lands according to her own devices, and Egypt was made to labor with bowed back for her."

In the seventh year of what was, technically, the reign of Thut-mosé III, Hat-shepsüt, in a swift and apparently bloodless *coup d'état*, broke the age-old tradition which had held that only a male could be the ruler of Egypt, and had herself formally proclaimed "king." One of the few women

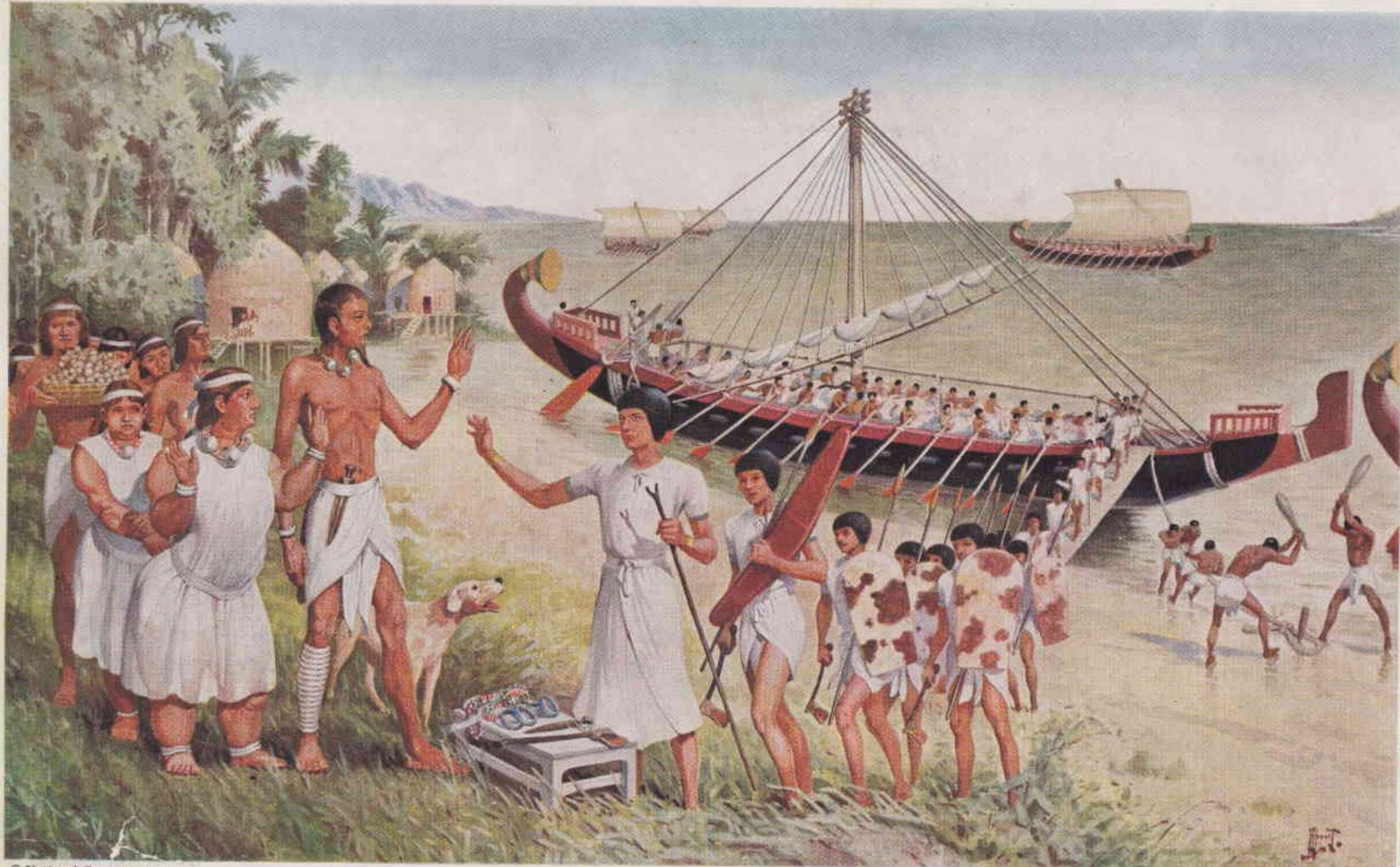
ever to hold that position, she assumed all the titles, attributes, and other paraphernalia of the pharaonic office.

In this startling gesture she was supported by a group of faithful and most able officials, foremost among whom was her special favorite, Sen-Müt, Chief Steward of the estates of Amūn and tutor of her daughter, the Princess Neferu-Rē'.

For fourteen years more Thut-mosé III, who had been allowed to retain a nominal position as co-regent and had been married to his half-sister, Neferu-Rē', was forced to subject his own proud spirit to the will of his aunt (Hat-shepsüt): but from the sixteenth year of his reign onward he began to come into his own.

In this year or shortly afterwards Neferu-Rē' died, presumably the victim of an illness, and two or three years later Sen-Müt fell or was forced out of royal favor. In 1480 B. C., having dominated the first twenty-one years of the reign of her nephew and having stirred in the breast of that spirited young man a hatred for herself which beggars description, Hat-shepsüt died or was thrust out of the way.

Thus, Thut-mosé III at last came into his birthright, and during the remaining 33 years of his long life performed those deeds of high prowess which have justly earned for him a reputation as one of Egypt's greatest pharaohs.



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Painting by H. M. Herget

"The Arrival of the King's Messenger in God's Land, Together with the Army Which Is Behind Him, Before the Rulers of Punt"
Queen Hat-shepsüt's naval expedition, sent to the land of Punt on the Somali coast to procure myrrh trees for the garden of the god Amún, is greeted there by the chief of the country and his deformed wife and daughter. (XVIIIth Dynasty, 8th year of the joint reign of Hat-shepsüt and Thut-mosé III, 1493 B. C.)

A Sea Voyage to a Remote Land

IN THE 8th year of the reign of Thut-mosë III a fleet of five sailing ships, each about sixty feet in length, unmoored from the bank at Thebes and stood out into the middle of the Nile, headed for the distant and half-legendary land of Pünt. Dispatched by Queen Hat-shepsüt, the expedition was to bring back to Egypt living myrrh trees, to be replanted in the garden of the state god, Amün.

Pünt, it is generally agreed, was situated somewhere along the coast of Somaliland. To reach it Hat-shepsüt's ships had to sail northward almost as far as modern Suez, cross over by canal into the Red Sea, and then undertake the long and rarely attempted voyage southward.

It is greatly to the credit of the queen's unnamed admiral that the fleet returned safely to Thebes in the following year. It had brought back, in addition to the potted myrrh trees, rich cargoes of ebony, ivory, gold, electrum, aromatic woods, cosmetics, and panther skins, not to mention apes, dogs, and natives of Pünt.

The land of Pünt and the entire progress of the expedition are pictured and described in detail in a set of painted reliefs, which, most happily, are preserved in Hat-shepsüt's temple at Deir el-Bahri at Thebes (page 490).

Our plate on page 488, drawn in its entirety from these reliefs, portrays the arrival of the fleet at Pünt. The flag-

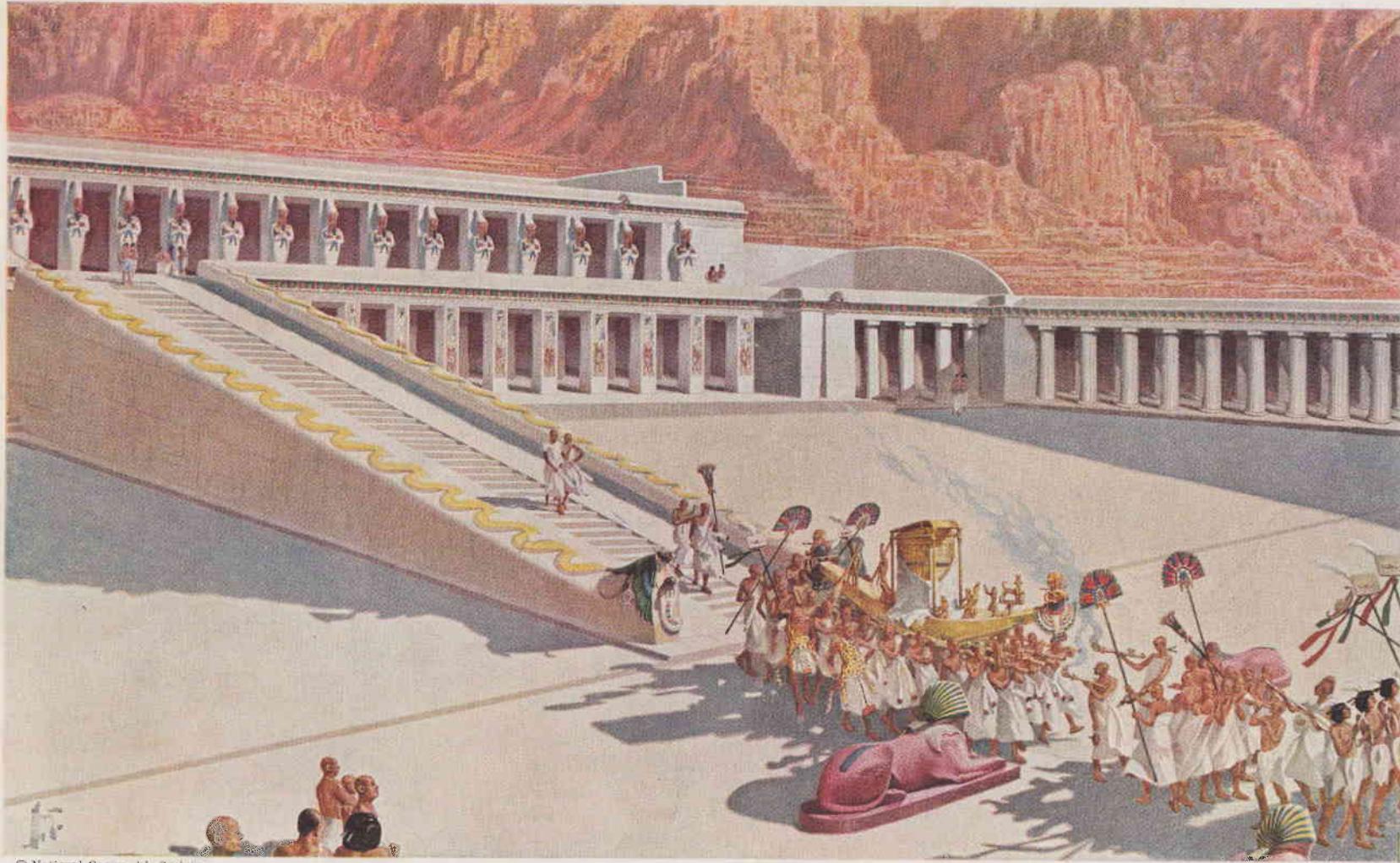
ship has already touched shore, its sail is furled, and its mooring stake is being driven into the sand of the beach by two muscular members of the crew.

The Egyptian admiral, accompanied by a detachment of marines, has landed and is about to ingratiate himself with the natives by means of a modest present of Egyptian weapons and cheap trinkets. These he has laid out on the small table before him, hoping that their glittering appearance will please those who have come to meet him.

Pe'-re'-hu, the tall, thin chief of Pünt, and E'ty, his fat, sway-backed wife, were too striking a pair to have been overlooked by the Egyptian artist, who evidently accompanied the expedition, and in the temple reliefs referred to they are depicted to the life.

These reliefs have, in fact, supplied us with nearly every detail of our painting: the Egyptian ships, their rigging, and their crews; the curious domical pile-dwellings of Pünt; the local flora and fauna; the facial types, clothing, coiffures, and ornaments of the Püntites; and even the mongrel pup, which barks a welcome to the visitors from afar.

Racially and even culturally the Püntites and the Egyptians appear to have been related—a fact which seems in no way to have lessened the intense curiosity with which the two peoples regarded each other.



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Painting by H. M. Herget

"Thou Seest Amun in His Beautiful Festival of the Valley, Thou Accompaniest Him into the Shrines and Temples"

The procession of the barque of the god Amun leaves the temple of Queen Hat-shepsut at Deir el-Bahri. From the upper, balustraded ramp of the temple, it has passed to the second terrace. Pillars of the third portico, above, show painted limestone statues of Hat-shepsut in the form of the god Osiris. To the right is the shrine of Anubis and the famous "proto-Doric" colonnade. (XVIIIth Dynasty, latter part of the joint reign of Hat-shepsut and Thut-mosé III, 1485-1480 B. C.)

Amun-Rē, "King of the Gods", Pays His Yearly Visit to Queen Hat-shépsüt's Temple in Western Thebes

HAT-SHEPSÜT's mortuary temple, designed and built for her by Sen-Müt, occupies an imposing bay of the western cliffs at Thebes, three miles back from the bank of the Nile and almost immediately opposite the great temple of Amūn at El Karnak. Nestled into the base of the precipitous rock walls of the cliff and admirably adapted to its magnificent natural setting, this unusual building, even in its present ruined state, is a monument of great charm.

From the level of the desert plain the courts of the temple, each fronted by a beautifully proportioned colonnade, rise in wide, retreating steps, the upper court and the central sanctuary cut back into the living rock. Leading from the river bank to the temple there was in ancient times a walled avenue, three miles long, bordered by trees and flanked along its entire length by brightly colored sandstone sphinxes of the female "king."

Once a year, on the occasion of the "Festival of the Western Valley," the image of the god Amūn was ferried across the river from El Karnak in the great state barge "Powerful-is-the-Front-of-Amūn." It was borne up this avenue in the richly adorned portable boat of the god, and

deposited for a short time in the sanctuary of the temple, where the god would receive tribute (page 468).

After accepting the prescribed offerings from the royal patron of the temple, the god, still in his barque, was borne down the ramps to the plain, and for two days made visits to temples on the west bank before returning to El Karnak.

The barque was carried on the shoulders of thirty-two priests, who paused to rest from time to time at stations provided at regular intervals along the way. A motley procession of standard-bearers, fan-bearers, censers, soldiers, musicians, singers, and priests preceded the barque.

Outside the temple precincts the procession was joined by the townspeople of Thebes, for whom this festival, like the many others celebrated throughout the year, was a never-ending source of delight.

The details of the barque and the procession are drawn chiefly from the somewhat later reliefs which the young King Tüt-anhk-Amūn caused to be carved in the temple of Amūn at Luxor. The reconstruction of Hat-shépsüt's temple we owe largely to long years of work and study by the Egyptian Expedition of New York's Metropolitan Museum.

Egyptian Chariots at Armageddon

THUT-MOSĒ III's first act, upon finding himself sole ruler of Egypt, was the attempt to erase every trace and destroy completely the memory of Hat-shepsüt. Her inscriptions, wherever visible, were covered over or mutilated, her statues were smashed to pieces, and her name was stricken from the roll of the Egyptian royal family.

Having vented the accumulated rage of twenty years on the monuments of his detested co-regent, the young king immediately put into operation his plans for the re-conquest of the Egyptian empire. He directed his first blow at Syria, where the local dynasts, profiting by the two decades of Hat-shepsüt's womanly rule, were in full revolt.

On the 15th of May, 1478 b. c., the Egyptian army, descending from the heights of Carmel, fell upon the Syrian allies in the plain of Esdraelon, driving them back into the strategically important and heavily fortified city of Megiddo, which was promptly invested and soon forced to surrender.

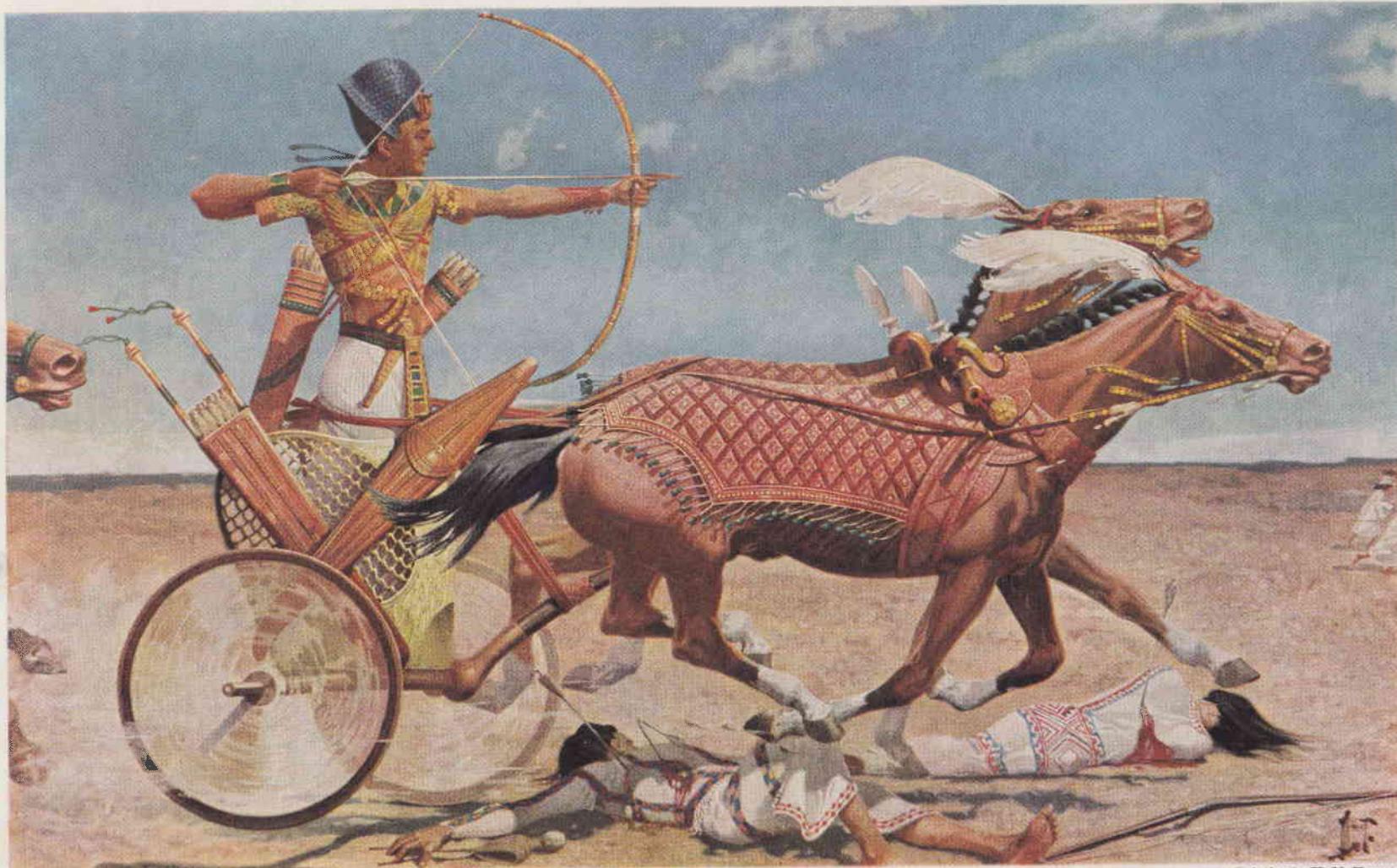
Thut-mosē III's arrogant disdain for military strategy in this and in most of his other battles was more than compensated for by the efficiency of the Egyptian war chariot as a fighting machine. Of strong, but very light construction, these vehicles were capable of attaining great speed

instantly. They could be maneuvered with the utmost ease, and, thanks to their long axles and large, springy wheels, were usable over almost any type of terrain.

Unarmored and partaking of none of the qualities of the modern "tank," the chariot was intended solely to provide a movable platform from which the crack Egyptian archer could pour a murderous rain of arrows upon a less mobile enemy force.

More often than not in the early New Kingdom each warrior managed his own chariot, as shown in our plate. Later, however, we find the chariot crews consisting of two men, a charioteer and a fighter.

During the ensuing eighteen years Thut-mosē III led no less than sixteen expeditions into Asia, setting out in the spring of each year and returning in the fall, flushed with new conquests and laden with plunder and tribute. When, in the 43rd year of his reign, the now aging monarch turned his face from the north and concentrated his always vigorous attention on his Nubian provinces and on matters at home, he had reduced hither Asia to abject servility and given the eastern Mediterranean world a beating that it did not forget for centuries to come.



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"His Majesty Went Forth in a Chariot of Electrum, Arrayed in His Weapons of War"

King Thut-mosé III, leading his chariot division, charges the host of the Syrians in the plain before Har Megiddo, the Biblical Armageddon. He wears the Blue Crown, or royal war helmet, and about his chest is bound a gold-overlaid leather corselet. His heavy compound bow can drive bronze-tipped arrows through a thick sheet of metal. Javelins, and extra arrows and bows are in cases strapped to the vehicle. (XVIIIth Dynasty, 23rd regnal year of Thut-mosé III, 1478 B. C.)

Painting by H. M. Berget

The Vintage of 1400 B. C.

ON PAGE 495 it is no longer spring on the blood-drenched field of Armageddon, but late summer on the Egyptian estate of the Royal Scribe, Kha'-em-ḥêt. The purple grapes, hanging ripe from the extensive arbor of the wealthy official, are being harvested by Kha'-em-ḥêt's farm hands. Among the laborers we can recognize, besides the native Egyptians, a negro from Central Africa, a bearded Semite from the district of the Lebanon, and a blond Caucasian from the northern shores of the Mediterranean—a rather cosmopolitan crew.

Carried in baskets to the pottery (?) wine press, the grapes are trodden by a singing group of men and boys, who, to prevent themselves from slipping in the juicy mash, are clinging to ropes suspended from a framework.

The new wine is scooped from the catch-basin and promptly "bottled" in large pottery amphorae, the interiors of which have been coated with a non-porous film of resin. The jars are capped with heavy mud stoppers, pierced with vents to prevent the fermenting liquid from bursting its containers or "blowing the cork."

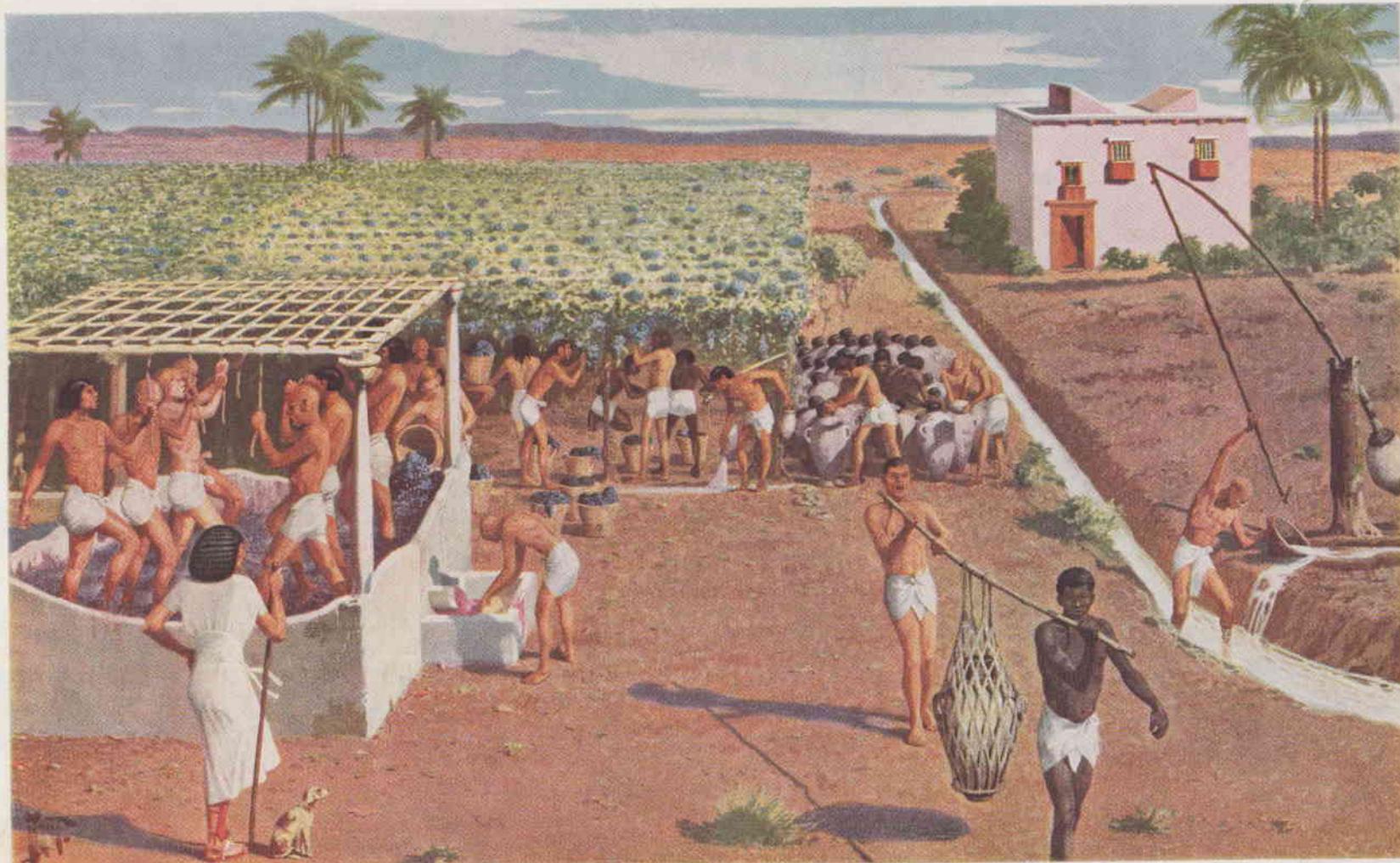
The stoppers, while still damp, are stamped in several places with the name of the estate or its owner, and on the sides of the jars is written the date of bottling. The trans-

portation of each of the heavy vessels to the wine cellar is accomplished by means of an intricately netted pot-sling, carried on a stout pole by two men.

In the arbor we see a man pouring water into the trenches from which spring the roots of the vines. At the right a peasant is irrigating the near-by field with the aid of a "shadūf," or well-sweep, a Mesopotamian invention, introduced into Egypt in the XVIIth Dynasty and still in common use.

Second in popularity only to beer, wine was manufactured and consumed on a large scale by the ancient Egyptians from at least as early as the first historic dynasty (3000 B. C.). In addition to the domestic grape, palm, date, and pomegranate wines, foreign vintages, imported in bulk from Asia, were also much in favor with the discerning drinkers of the dynastic era.

Always a farmer at heart, the wealthy Egyptian official seems never to have let his love for his country estates wane during the centuries of Egyptian history. Over and over again in their sculptured or brightly painted tomb-chapels at Thebes great men like Kha'-em-ḥêt are shown inspecting all the activities of their farms, frequently taking their lunches with them and making a day of it.



© National Geographic Society

Painting by H. M. Herget

"Causing the Vintage to Be Pressed"

At the grape harvest and the making of wine on the estate of the Royal Scribe, Kha'-'em-hêt, Kha'-'em-hêt in person appears (left), dressed for a tour of his fields. His leather shin-guards are to protect his legs from brambles and the like. The roof of the typical New Kingdom house in the background is fitted with large ventilators to catch whatever breeze may be blowing during the scorching Egyptian summer. (XVIIIth Dynasty, reign of King Amen-ḥotpe III, 1400-1375 B. C.)

A Family Outing in the Papyrus Pools

THE courtier Menena, like most other Egyptian husbands and fathers, was an indulgent man, and, when his job as "Scribe of the Fields of the Lord of the Two Lands" permitted him a little time off for duck hunting, he took his whole family with him. His making a family outing of the hunt was perhaps because the joy of merely being out on the cool water in his skiff of bundled papyrus reeds outweighed either the desire or the necessity of bringing in a large bag of ducks.

Menena is, however, tending strictly to business, his two decoy birds—small herons—held high in his left hand above the towering papyrus, into which the skiff has been nosed, his boomerang poised in his right hand for the throw.

The boomerang, or throw stick, was a favorite sporting weapon in Egypt from the earliest times, and so expert did its users become that they were capable at close range of knocking down a bird as it was rising in flight.

The pintail ducks, seen rising to the right, will be one fewer when this expert marksman has made his cast. Promptly the stunned bird will be retrieved by the light-footed cat which stands in the bow of the skiff beside Menena's son.

The two daughters are less interested in their father's sport than in the gathering of lotus flowers for decorating either themselves or their home; but Menena's wife, in

addition to holding his spare boomerangs, is showing the proper zeal.

The family, with the exception of the younger daughter, may seem a bit over-dressed for a picnic in the papyrus thickets, but this is the way they are all represented in the famous painting in Menena's tomb at Thebes.

The papyrus plant, here shown serving as a natural blind for an amateur duck hunter, played a dominant rôle in ancient Egyptian life, art, and industry. Bound together, its sturdy seven-foot stalks formed supports for the roofs of the Egyptians' earliest houses, and from these primitive uprights developed the graceful papyrus column of the type, which, carved in stone at a colossal scale, upholds the roofs of the great temples of the New Kingdom.

From roped bundles of papyrus the Egyptian built his first boats, similar to the skiff shown here. The fibres of the pith of the reed provided him with the material for his writing paper, and from the tough outer bark he made baskets, hampers, crates, and furniture of all sorts. As the emblem of Lower Egypt, where it grows thickest, and as a constantly employed heraldic and decorative motif the plant is well known in its conventionalized form to anyone acquainted with Egyptian art. Few plants have played so outstanding a part in the life of a nation as did the papyrus in the ancient land of the Nile.



© National Geographic Society

Painting by H. M. Herget

"Amuse Thyself with Field Sports; the Water Fowl Has His Moment of Death Reckoned for Him"

The courtier Menena, accompanied by his family, enjoys a pleasant day fowling in the papyrus thickets. The skiffs and their occupants waited silently behind the natural blinds formed by the papyrus until the birds, attracted by the decoys, came within range of the throw-stick. (XVIIIth Dynasty, reign of King Thutmosé IV, 1420-1411 B. C.)

At Home with the Average Egyptian and His Wife

ANY general account of ancient Egypt is, of necessity, largely taken up with the splendor of its rulers, the wealth of its great officials, and, at the opposite end of the scale, the simple poverty of its peasants. Thus we are prone to forget that, as in every great country, there existed at all times in the Nile Valley a large and, for the most part, well-to-do middle class—good, solid citizens, individually of no particular importance, but, collectively, the backbone of the nation.

Two such people appear on page 499. The man is, let us say, a clerk in a branch of the royal treasury, his wife a singer in the temple choir of Amün. Their clothes, their few articles of jewelry, and the furnishings of their home, though hardly magnificent, are of good quality.

In addition to their house and small garden they probably own a little farmland, on which they pay the required taxes. It is likely that out of their modest living expenses they have saved enough to send their son to the school of scribes at Thebes and so assure him of respectable and well paid employment when he comes of age.

Just now the couple are amusing themselves with one of their most prized possessions—a game-box of cedar, inlaid with panels of blue faience. The top and bottom of the box carry the squared lay-outs, or

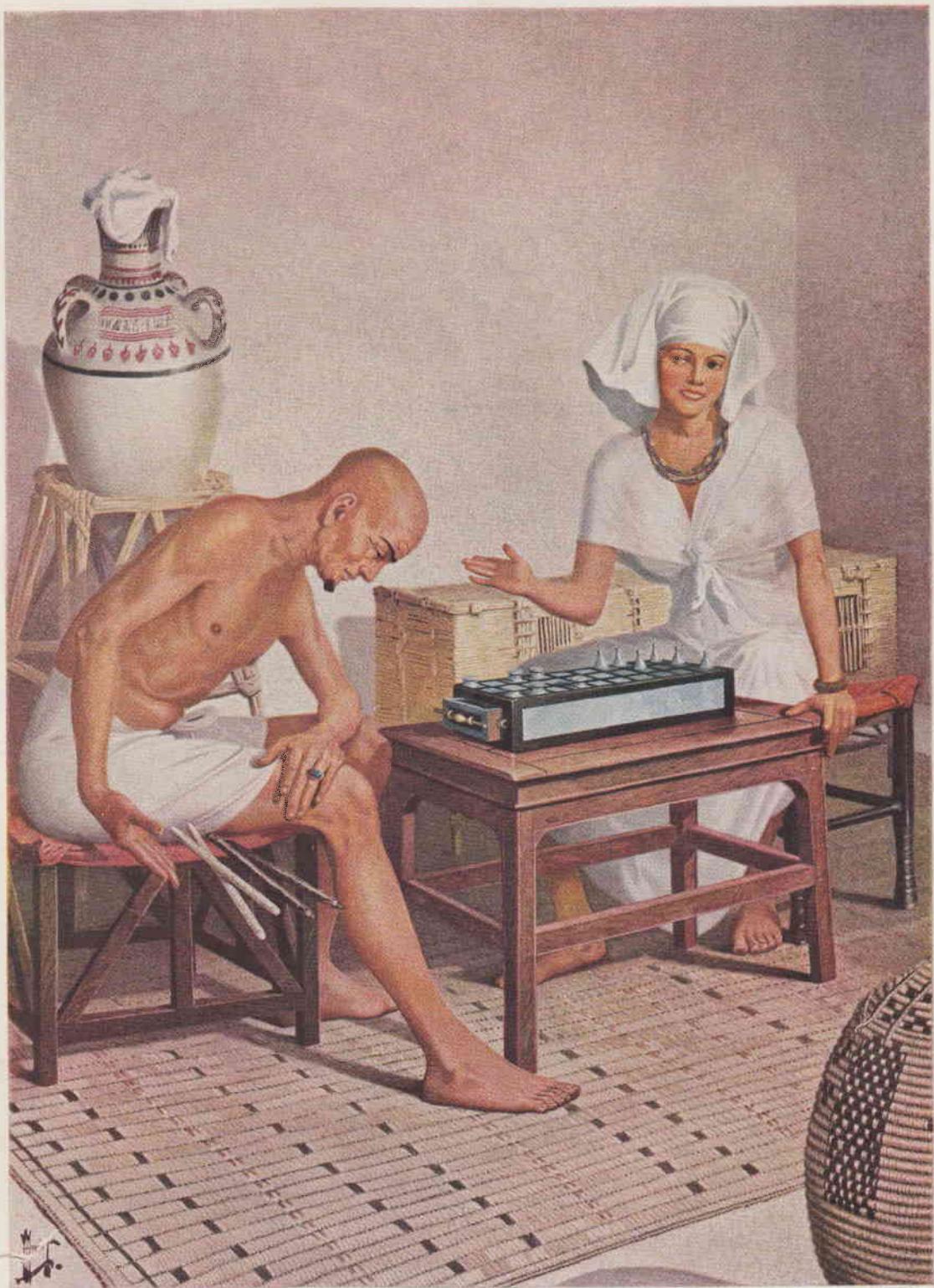
“boards,” for the two most popular Egyptian draughts games, the game of *Senit* on the top, the game of *Tshau* (“Robbers”) on the underside.

The faience playing pieces, which are the same for both games, were kept, when not in use, in the drawer in the end of the box. The set of four carved wands was used in place of knuckle-bones or dice, the way in which they fell, crossed, or pointed, when cast by a player, determining the moves that player was allowed to make.

The game in progress, *Senit*, was played on a board of thirty squares, the squares laid out in three rows of ten. Certain key squares are inscribed as being advantageous or disadvantageous to the player landing on them.

Six pieces (usually conical or spool shaped) were used by each player, the object of the game being, not to take the opponent’s pieces, but, apparently, to pass through them and return to the original starting point, at the same time blocking the other fellow’s moves as much as possible.

The prominent rôle played by such games in the lives of the ancient Egyptians is indicated by the fact that a picture of a draughtsboard was one of the oldest and most common signs used in their written language, and that the games played on it are mentioned repeatedly in their funerary and religious literature.



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Painting by H. M. Herget

"Sitting . . . , Playing Draughts, and Finding Twofold Contentment"

A middle-class Egyptian couple enjoy playing "Senit," one of several popular table games of the dynastic Egyptians. In play it resembled modern parchesi and backgammon. The moves were determined by the manner in which the set of four sticks, or wands, fell when cast. (Mid-XVIIIth Dynasty, 1500-1400 B. C.)

The Aten Shines, King Akh-en-Aten Dreams, and the XVIIIth Dynasty Draws to a Close

AS THE XVIIIth Dynasty passed into its third century, Egypt, imbued with Asiatic ideas and Asiatic blood, which now flowed even in the veins of the royal family, turned momentarily from its old traditions and its old gods, and set up a new religion devoted exclusively to the worship of the vital force emanating from the disk of the sun, "the living Aten."

Simpler and more general in its appeal than the old Amün cult, which it attempted to replace, this monotheistic solar religion concerned itself not at all with morality, but placed its emphasis on "harmony," joy of living, love of nature, intellectual liberty, individualism and spontaneity. Brief as was its existence, its effect on Egyptian life, and particularly on Egyptian art, endured for many centuries after the "heresy" itself had been forgotten.

The chief exponent of the worship of the Aten was King Amen-hotpe III's effeminate son, Amen-hotpe IV, who came to the throne of Egypt in 1375 B. C. For four years this sensitive idealist ruled at Thebes, and then, accompanied by his beautiful wife, Queen Nefret-ity, and a large group of devoted courtiers, withdrew to the quiet isolation of Tell el-Amärneh (El 'Amärna), some two hundred miles down the Nile, where he caused to be built for himself and for his god a wonderful new city, named Akhet-Aten, "Horizon-of-Aten."

Here, having changed his own name to Akh-en-Aten ("Spirit-of-Aten"), the pharaoh dreamed away the remaining fifteen years of his reign, while the empire of his fathers, ignored and forgotten, fell slowly to pieces and disorder, and lawlessness overran the land of Egypt.

Before he died, Akh-en-Aten attempted to reconcile himself with the much persecuted, but still powerful, priesthood of Amün, and in so doing incurred the displeasure of Queen Nefret-ity, who removed herself to a palace in the extreme southern section of Akhet-Aten, and took with her thither her second daughter, 'Ankh-es-en-pa-Aten, and the latter's husband, young Tüt-'ankh-Aten.

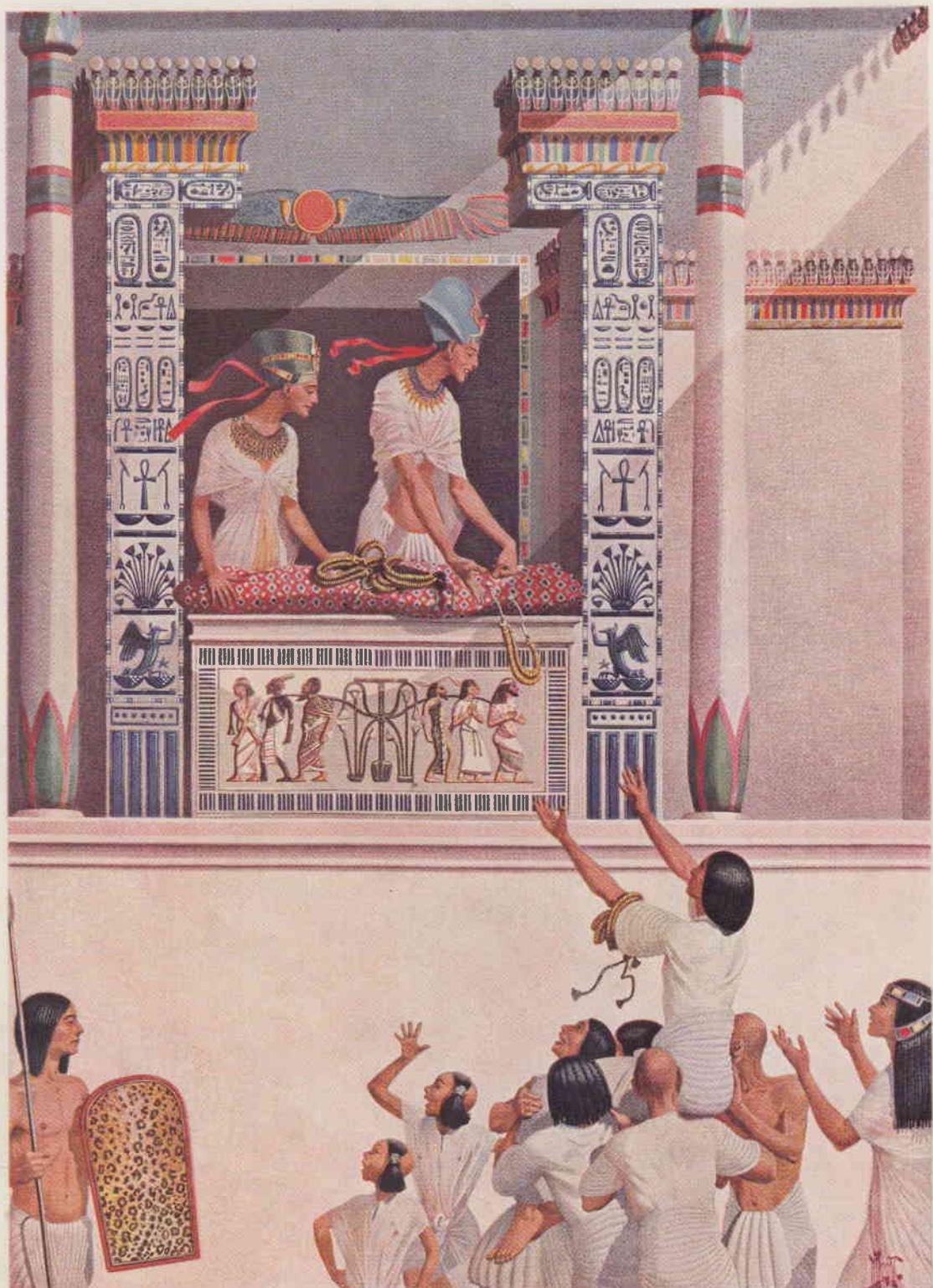
Following the brief reign of Akh-en-Aten's elder son-in-law, Semenkh-ka-Rē, Tüt-'ankh-Aten came to the throne, moved the royal residence back to Thebes, altered his name to Tüt-'ankh-Amün, and permitted the old religion and the old order of things to be restored.

At the end of a short and otherwise insignificant reign, Tüt-'ankh-Amün—famous principally because his tomb miraculously remained intact until its discovery in 1922—died at the age of eighteen, and was himself succeeded by the same Ay who appears in the foreground of the plate on page 501, now a decrepit old man.

Har-em-hab and the XIXth Dynasty

Ay did not last long, and about 1340 B. C. the government was taken over by the Quartermaster-General Har-em-hab, a man of great vigor, experience, and administrative ability, who during his twenty years as pharaoh repaired most of the damage wrought during the "Amärneh ('Amärna) Period" and died leaving Egypt and the Empire once more sound and prosperous.

At the death of Har-em-hab in 1320 B. C. the throne passed to his old companion-in-arms, General Pa-Ramessu, better known as King Ramesses I, founder of the XIXth Dynasty.



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Painting by H. M. Herget

"Lo, His Majesty Appeared Like the Sun in His Palace . . ."

King Akh-en-Aten and Queen Nefret-ity, standing on the "Balcony of Royal Appearances" at Tell el-'Amârneh (El 'Amârneh), publicly award the "gold of honor" to a favored courtier, the Priest Ay, later king of Egypt. Ay is surrounded by his wife, friends, and children. (Late XVIIIth Dynasty, reign of Akh-en-Aten, 1375-1357 B. C.)

A Wealthy Theban Is Buried in His Tomb in the Western Cliffs

IN 1318 B. C. the aged Ramesses gave way to his son, the brilliant Sethy I, who, after twenty-one years as king, was replaced by *his* son, Ramesses II—probably the best known of all Egypt's pharaohs (page 482).

The kings who followed Ramesses II—including Mer-en-Ptah, often identified as “the pharaoh of the Exodus”—sink into insignificance beside his titanic figure; but it was not until many years after his death that the New Kingdom came to an end and dynastic Egypt entered upon its last, long drawn out death struggle.

With this briefest of historical outlines as a background, we are now ready to resume our inspection of the existences of the people who experienced life and death under the pharaohs just named. Let us start with a death.

The funeral procession, leaving the city of the living on the east bank of the Nile, has crossed the river, wound deep into the western cliffs, where lie the “eternal dwellings” of the dead, and halted before the portico of a freshly prepared tomb. The ox-drawn hearse, reproducing in its form the barque of the sun-god Rē, stands empty at the left of the picture, and behind and past it come the bearers of the tomb furniture and other funerary equipment.

Beyond the hearse we see the “Canopic” chest, also mounted upon a sledge, and containing, in four stone jars, the four vital organs of the dead man, removed from his body during the process of mummification. At the left

end of the portico the “Muu,” a pair of mummers, wearing burlesque crowns of reeds, are performing their curious funeral dance.

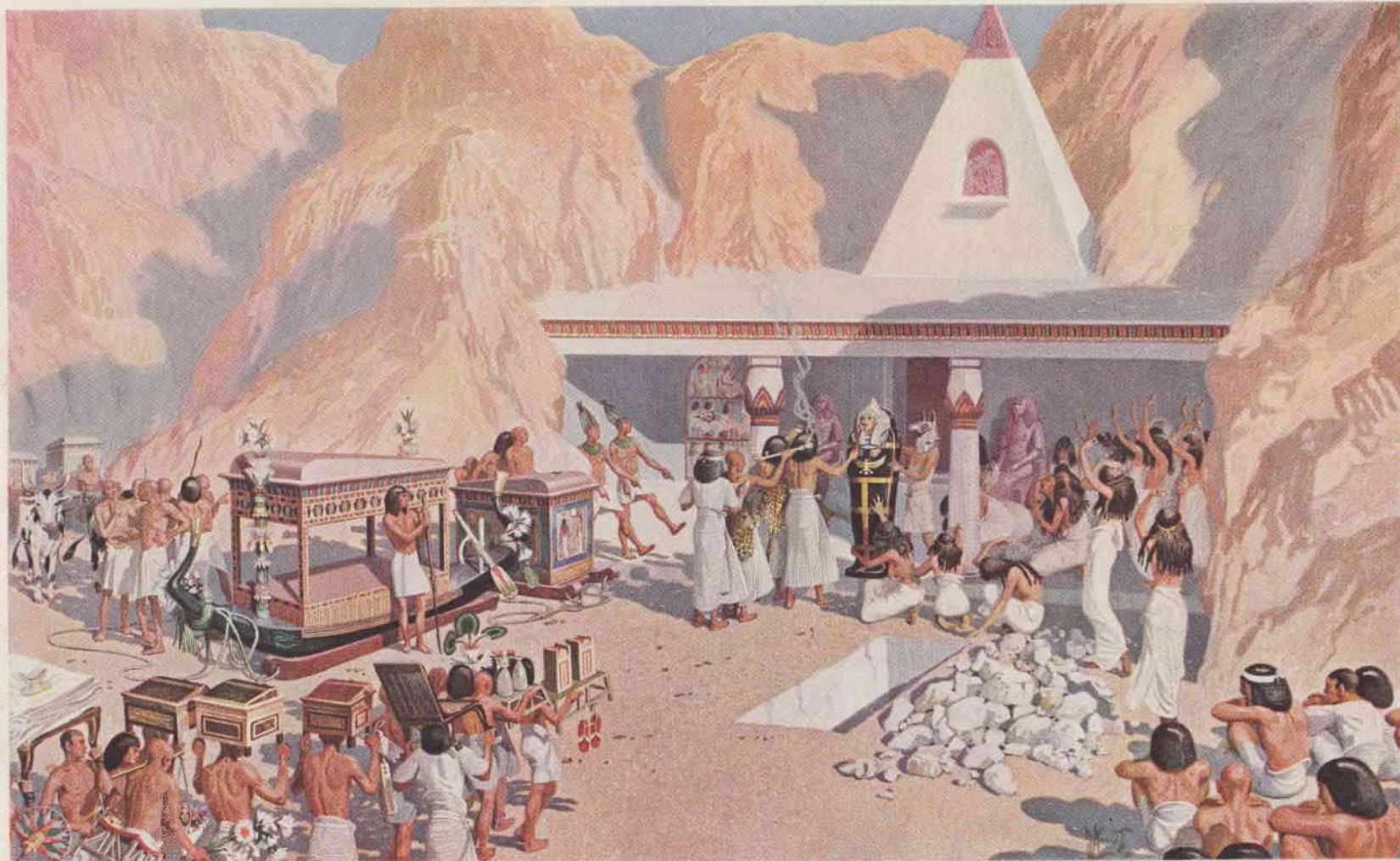
The body of the dead, encased in a coffin made in the form of the god Osiris, has been stood upright before the door of the tomb, supported by a masked priest, impersonating the dog-headed god Anubis, the divine embalmer.

The “Sem,” or chief mortuary priest, wearing the leopard skin of his office and assisted by a group of other priests, is “opening the mouth” (i.e., restoring speech to) the deceased by touching the lips of the coffin with a ceremonial instrument shaped like an adze.

This act of magic, one of the final rites in the burial service, is witnessed in gloomy silence by the male relatives of the dead man, who sit brooding at the right of the scene. It is greeted with wails of anguish and violent gestures of grief by the female mourners, many of whom are undoubtedly professionals hired for the occasion.

The sorrow of the woman who clings to the legs of the coffin, however, is genuine, for she is the widow of the deceased, and even her conviction, that, in dying, he has but passed to a new and better life, is small comfort.

High above on the capstone of the pyramid the spirit of the dead man is depicted singing the morning hymn to the sun-god, Rē, a song of praise repeated each dawn as the first rays of the sun warm the granite pinnacle of the tomb.



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Painting by H. M. Herget

"A Funeral Procession Is Made for Thee on the Day of Burial"

At a New Kingdom funeral in western Thebes, the tomb chapel, its columned portico built of limestone blocks, its interior hewn out of the living rock, is surmounted by a small pyramid of brick, covered with stucco and capped by a granite pyramidion. In the porch may be seen the stela and two funerary statues of the deceased, and in the court before the chapel, the mouth of the secret burial shaft. "The mummy-shell is of gold, with head of lapis lazuli; the cover is (closed) over thee and thou art placed upon a sledge. Oxen drag thee and the dance of the Muu is performed for thee at the door of the tomb." (XVIIIth-XIXth Dynasties, 1500-1200 B. C.)

User-hēt Entertains

COMPLACENT in his assurance of a blessed immortality, the ancient Egyptian was unawed by the prospect of death. His hearty version of the motto, "Eat, drink, and be merry, for tomorrow we die," was said, as it has always been intended to be said, carelessly and cheerfully. His talent for enjoying the good things of this life was enormous, and his often elaborate parties were rollicking affairs indeed.

Prodigious consumption of spiced wine and beer featured these banquets, and guests were urged repeatedly to drink long and deeply. Rich and heavy perfumes filled the banquet hall, and garlands and bouquets of fresh flowers were everywhere to be seen. Brightly painted wine jars, and cups, bowls, and vases of gold, silver, and alabaster added a note of gaiety and opulence.

Music was provided by orchestras of thinly clad girls, playing the double reed pipe, the three-stringed lute, the six-stringed lyre, and the twenty-two-stringed harp, and beating out the time on big rectangular tambourines.

As the feasts, formal and decorous at the outset, gathered momentum, the tinkly rhythms increased their tempo, and the dancers passed from slow, dignified posturings to wilder

and more exciting movements, often culminating in a series of leaps, somersaults, back flips, and hand-springs.

All the while an army of butlers and serving girls circulated among the guests, plying them with food of every description, flavoring their drinks with spices poured out of little silver pitchers, supplying them with fresh garlands and fresh cones of perfume, rearranging their elaborate, but often disordered clothing, and helping them in other ways.

At the end of the party some of the participants had to be assisted, or even carried, to their homes; but this was regarded as a compliment to the hospitality of the host.

Urging his master to make the most of the fleeting hour, a harper at such an ancient Egyptian feast once sang:

"Put unguent and fine oil together to thy nostrils,
And garlands and lotus flowers on the body of thy be-
loved,
As she sitteth beside thee.
Set singing and music before thy face.
Cast all evil behind thee and bethink thee of joy,
Until that day cometh when one reacheth port
In the land that loveth silence."

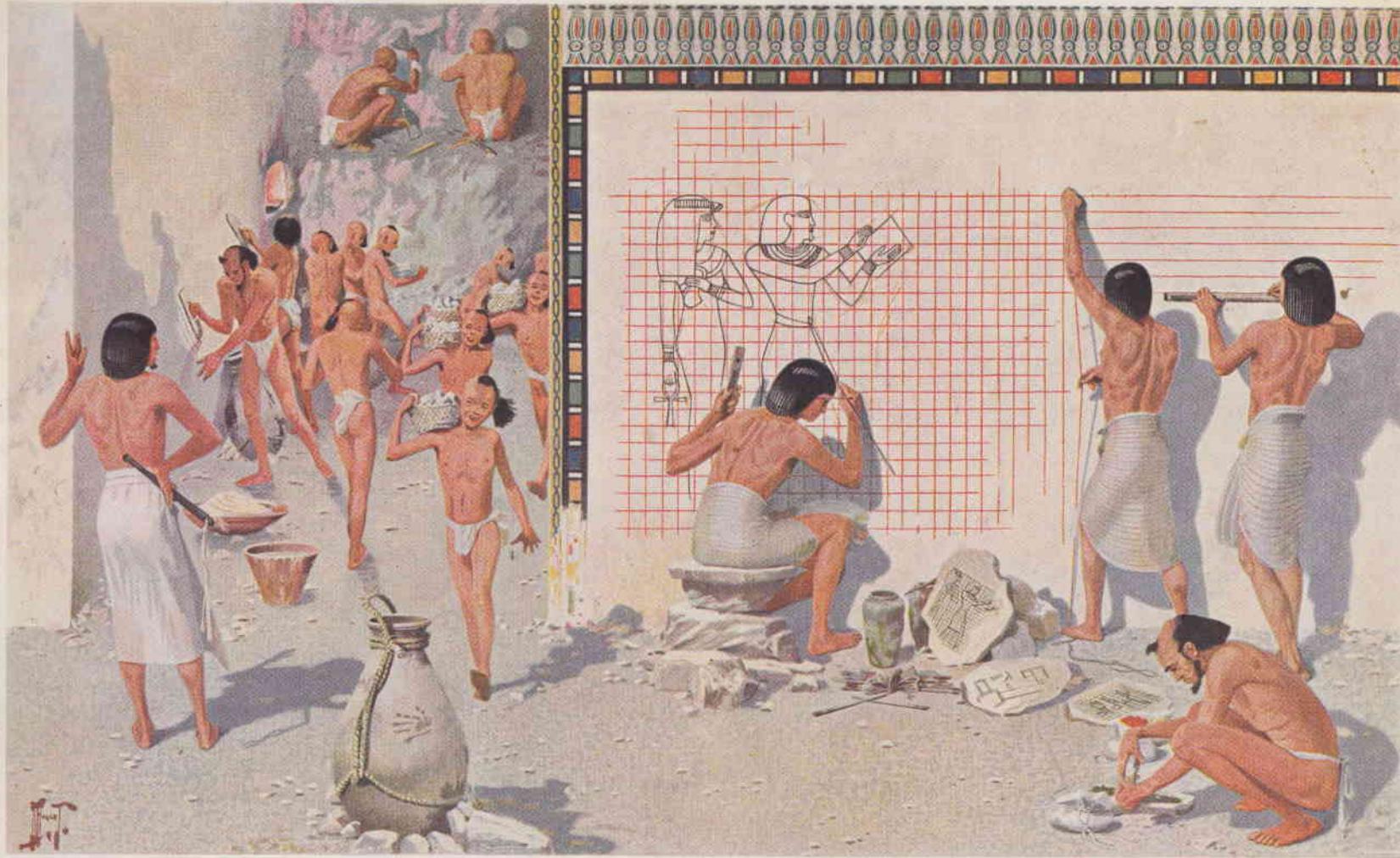


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Painting by H. M. Herget

"Spend the Day Merrily, O Priest!"

User-hêt, Chief Priest of the Royal Spirit of King Thüt-mosé I, gives a formal banquet in the central hall of his town house at Thebes. The host and hostess are seated together in the right foreground. The cones of perfumed fat, perched on the heads of the banqueters, will in the course of the long, hot afternoon melt and run down over their persons. (XIXth Dynasty, reign of King Sethy I, 1318-1298 B. C.)



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“And There Was Made for Me a Tomb in the Midst of the Tombs”

“The masons that hew tombs marked out its plan; the master-draughtsmen designed in it; the master-sculptors carved in it; and the master-architects who are in the necropolis bestowed their care upon it.” It was customary to plaster and paint each part of a tomb as soon as it was cut, even though the adjoining portions might be still in the process of excavation. In this scene at Thebes artists are laying out the decoration of the transverse forehall of the private tomb chapel, while masons and basket-boys are at work in the as yet unfinished longitudinal passage. (XVIIIth-XIXth Dynasties, 1500-1200 B. C.)

Painting by H. M. Herget

Preparation of a Painted Tomb-chapel—The Egyptian Artist and His Methods

A T-SHAPED tomb-chapel, hewn out of the side of a hill in the Theban necropolis, is nearing completion. The rock-cut walls of the forehall of the chapel have been given a thick coating of plaster and, being now ready to receive their decoration, have been turned over to a learned scribe and his staff of painters and draughtsmen.

The latter are engaged in transferring to the walls a series of scenes and inscriptions, already planned and drawn up at small scale on flakes of limestone. To insure accurate enlargements of the original drawings and to maintain the strict canon of proportions, under which the Egyptian artist always worked, proportion squares are laid out on both the sketches and the walls, the lines which form the squares being "snapped" on by means of a cord coated with red pigment.

The man marking off the spacing of the lines is using a measuring rod, one royal cubit (20.6 inches) in length, divided into 7 "palms" of 4 "digits" each. On the squared "grid" so prepared there is made a full-size preliminary sketch in red outline and, over this, the finished drawing in black outline, a fine reed brush being used to lay in both drawings.

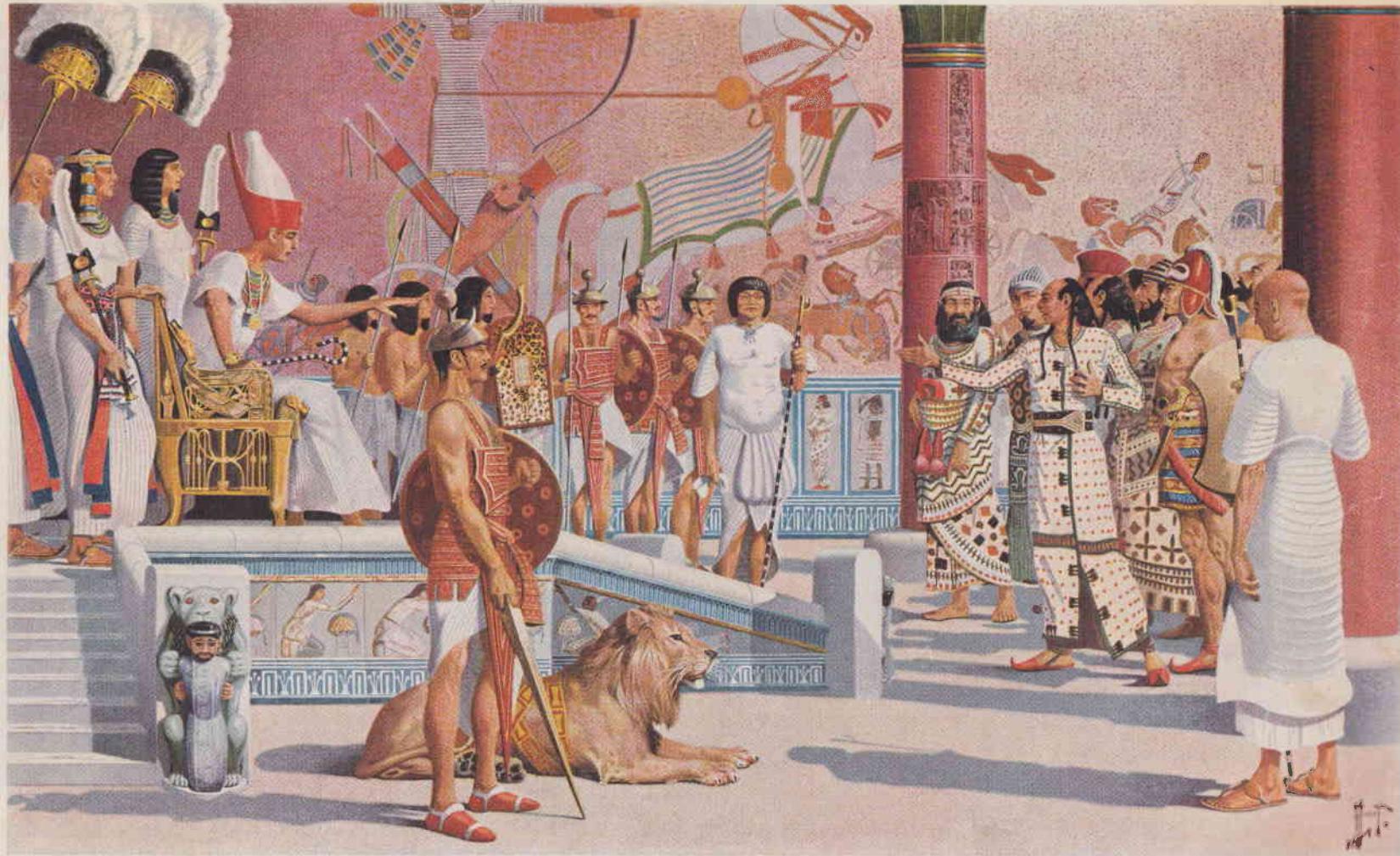
In coloring the drawings, the inscriptions, the borders, and the backgrounds, the painters will use blue, red, yellow, and green pigments, ground to powder on the spot and mixed with beeswax, albumin, gum, or a similar vehicle. Their

paint brushes are palm sticks with carefully frayed ends, or bundles of grass lashed tightly together with grass cord.

Meanwhile the excavation of the longitudinal passage of the chapel is progressing rapidly. The stream of limestone chip, falling from the heavy bronze chisels of the stone-cutters, is being run out of the tomb by an endless line of basket-boys; and already the plasterers are at work, smoothing over the walls at the forward end of the passage. Presiding over all this part of the work is the gang foreman, armed with his symbol of office—a heavy whip, impressive and formidable in appearance, but probably rarely used.

Many tombs at Thebes and elsewhere were pressed into service while their decoration and often even their excavation was in an unfinished state. Such tombs have provided the modern student with invaluable information as to the methods used. This information has been swelled by the discovery near several tombs of the work records and other memoranda, written down day by day on potsherds and flakes of limestone by the scribes in charge of the work.

Discarded by the ancient writers as soon as they had served their purpose, these short notes give us a vivid picture of the daily progress of the work, of the number and types of artisans employed, of the materials, food, and clothing supplied to the gangs, and of the amusing small details which cropped up during the course of the job.



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Painting by H. M. Bergner

"Lo, His Majesty Was at the City, Called 'House-of-Ramesses-Beloved-of-Amún' . . . There Came the King's Messenger . . . to Grieve Peace"

Ramesses II, enthroned in the audience hall of his Delta palace, receives a delegation of Asiatics, headed by the envoy of Khattushili, king of the Hittites, with whom he subsequently concluded a treaty of peace. On the pharaoh's right stands his eldest son, Prince Amún-her-khepesh-ef, and, drawn up beside the throne dais, are members of the king's Sardinian bodyguard, as well as native Egyptian troops. The lion is a royal pet. (XIXth Dynasty, 21st year of Ramesses II, 1277 B. C.)

Ramesses "the Great"

WHETHER or not the second of the twelve kings of Egypt named Ramesses was entitled to the epithet now commonly applied to him is an open question. There can, however, be no doubt that, if not actually "great," he was one of the most remarkable—or, better, "incredible"—rulers the earth has known. A few statistics will show what is meant.

Ramesses II, born in 1318 b. c., came to the throne in 1298 and reigned the amazing total of 67 years, dying in 1232 at the ripe age of 86.

The names of seven of his queens, seventy-nine of his sons, and thirty-one of his daughters have been preserved to us, but this probably does not begin to represent the total number of his wives and children.

Buildings erected, enlarged, or completed in his reign include the Ramesseum—his great mortuary temple and palace in western Thebes—the temple of Amūn at Luxor, the hypostyle hall and other structures at El Karnak, his own and his father's temples at Abýdos, his father's temple at El Qurna, the temple of Ptah at Memphis, several large buildings at Tanis, a palace at El Qantara, and the two imposing rock temples at Abu Simbil in Nubia (pages 480-481).

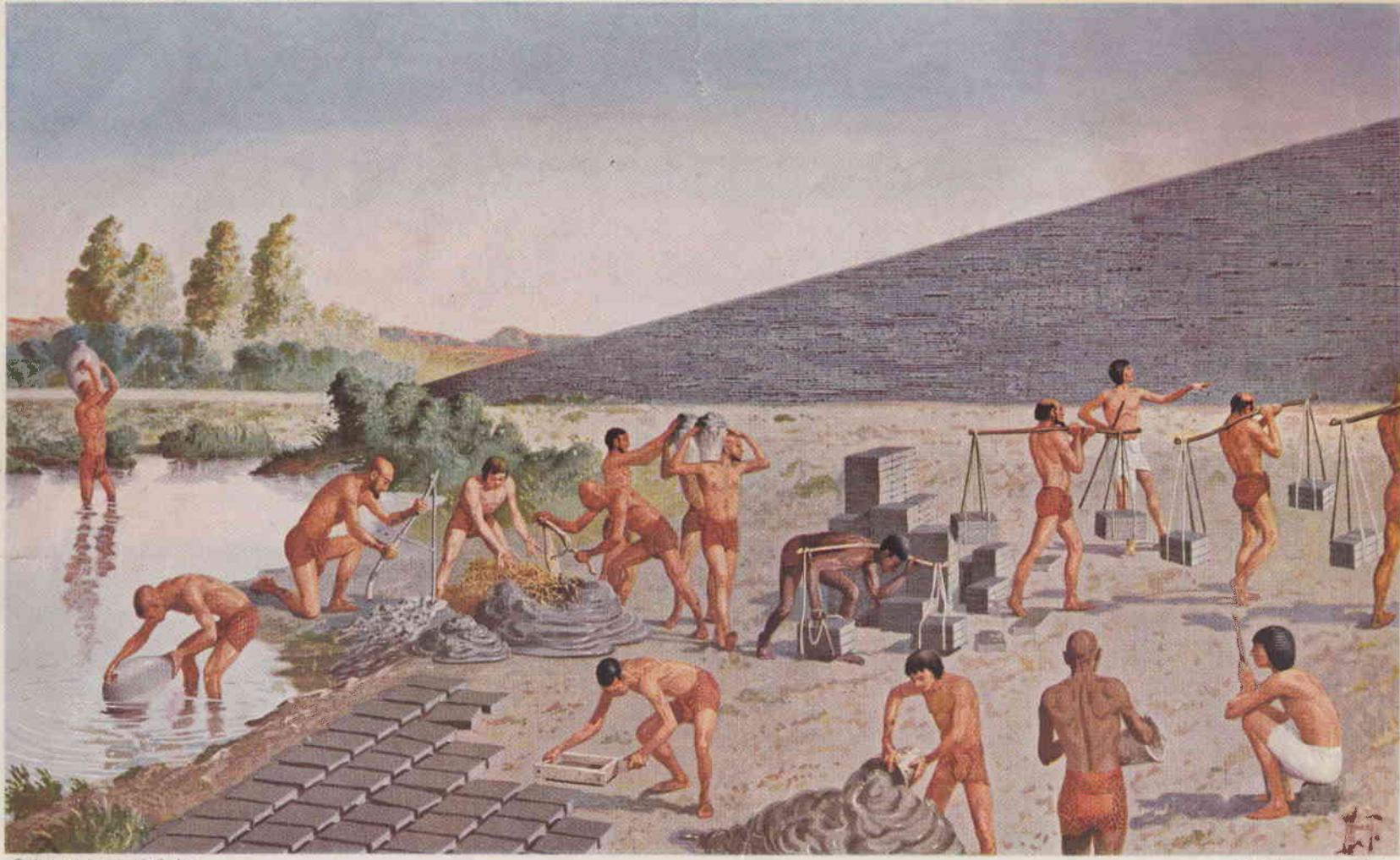
By virtue of his own gigantic building activities and his constant usurpation of the monuments of earlier kings, his

name appears on almost every ancient building in Egypt and on literally hundreds of lesser monuments.

As a warrior he was less distinguished than as a builder. He did, however, conduct allegedly successful campaigns against the Nubians, the Libyans, the Syrians, and the Mediterranean islanders; and managed to check for the time being the rising power of the Hittites of Asia Minor. His outstanding military exploit was his inconclusive victory over the Hittites and their allies in the battle of Kadesh, where, whatever else may be said of him, he did undoubtedly display great personal valor.

Personally Ramesses II was every inch a king: tall, handsome, majestic in his bearing, and utterly reckless, both on the field of battle and in civil life. His vitality has probably never been surpassed, and this, coupled with his undoubted popularity, permitted him to accomplish deeds, which a nobler and more intelligent ruler might well have found impossible.

His greatest faults were his insatiable desire for publicity and his unparalleled talent for boasting—faults which have too often caused posterity, unimpressed and thoroughly bored by his endless self-eulogies, to dismiss him as an empty and pompous "blowhard," unworthy serious consideration.



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Painting by H. M. Herget

"Captivity Which His Majesty Brought, for the Works of the Temple of Amun"

Foreign captives, among whom may be recognized several men of Semitic race, are engaged in making bricks for a construction ramp used in building the temple of Amun at El Karnak. The scene, though taken from an XVIIIth Dynasty tomb painting, shows precisely the kind of work exacted from the Hebrews by the XIXth Dynasty "pharaoh of the oppression". The network loinloths worn by the laborers are of slit leather. (XVIIIth-XIXth Dynasties, 1500-1200 B. C.)

The Manufacture and Use of Brick in Ancient Egypt

THE average dictionary or encyclopedia derives the word *Adobe* from the Spanish *adobar*, "to plaster," and lets it go at that; but *dobe*, meaning "brick," was a common word in ancient Egypt fifty centuries before the Spaniards invaded the Western Hemisphere, and, as the Arabic *tuba*, survives to the present day.

Nor have the methods of making and using the Egyptian sun-dried mud brick changed one iota since the prehistoric period. The modern brickmaker uses the same simple wooden mold seen in our plate, "strikes" his bricks in the same manner as did his remote ancestor, and leaves them to dry on the same flat mud surface under the same scorching sun. Only the size of the brick itself has changed, the New Kingdom bricks (14 x 7 x 4½ inches) being larger than the modern product.

The mud used for making bricks has always been the dark gray Nile alluvium, mixed with sand or chopped barley straw, and kneaded with water into a thick paste. The straw, though helpful as a binder and a drying agent, is by no means essential, many excellent bricks having been turned out, using only sand as a binder, or, if the clay content of the mud was high, with no binder at all.

For six thousand years sun-dried brick has been the principal building material of the Egyptians, far surpassing in the extent of its use cut stone. The latter, first employed in the IIInd Dynasty, has been confined almost entirely to the construction of funerary and religious monuments, every other type of building—dwellings, city and temple walls, forts, storehouses, ramps, etc.—being of brick.

At an early period the Egyptian not only learned the secret of the arch and barrel vault, but mastered methods of laying and bonding brick, which enabled him to construct

walls and embankments of enormous thickness, as, for example, the 80-foot girdle wall of the city of Tanis.

Without construction ramps, buttresses, sand-chambers, and temporary scaffoldings of brick, the pyramids at Gîza and the temple of Amûn at El Karnak could never have been built, and it is therefore to the ancient Egyptians' knowledge of the uses of the humbler material that we owe the existence of these greatest of all stone monuments.

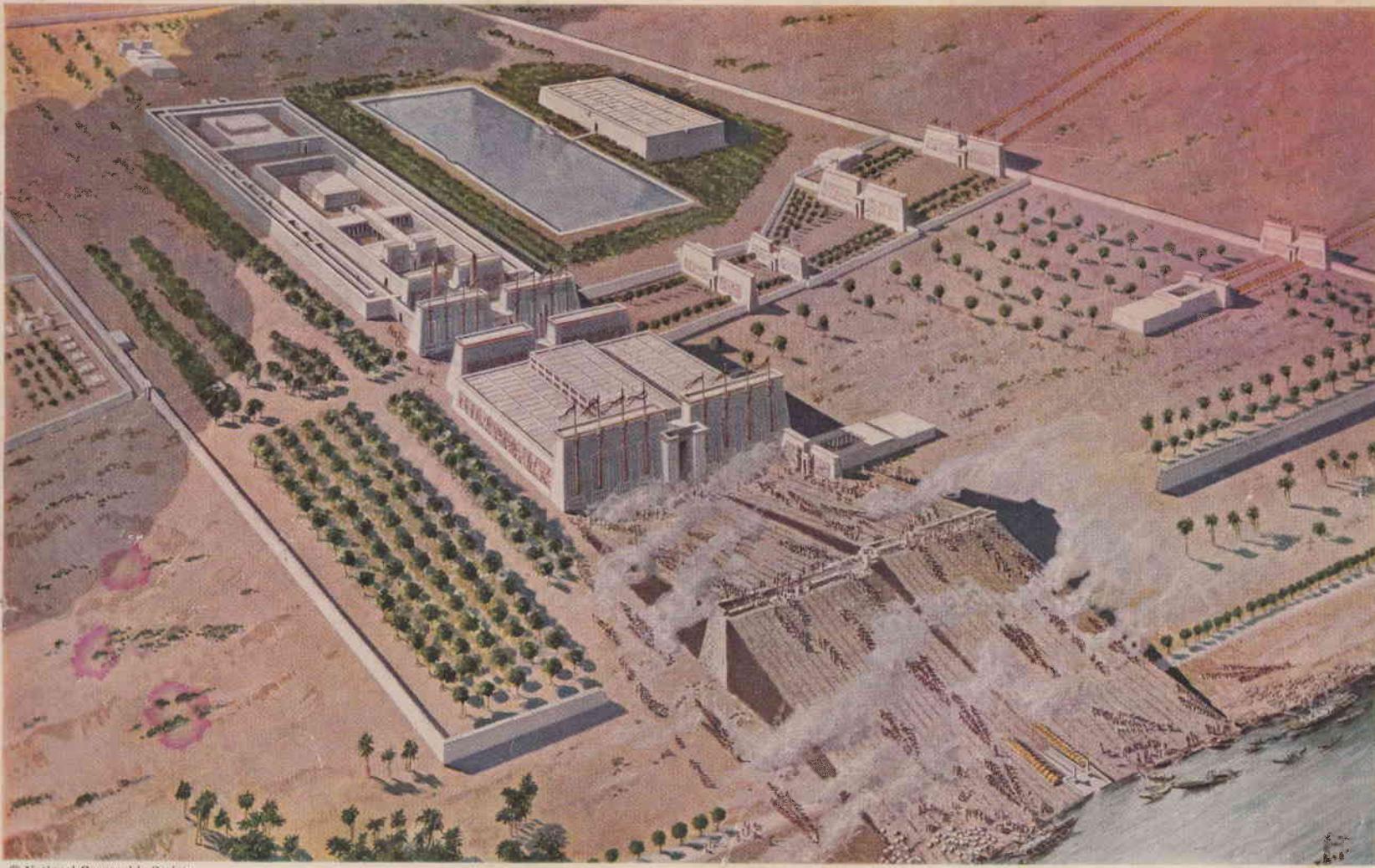
Decline of Egypt in the Late Dynastic Period

A civilization like that of ancient Egypt cannot be wiped out in a day. It required, in fact, almost nine hundred years—from the XIXth Dynasty to the Macedonian conquest in 332 B. C.—for the dynastic era to pass out of existence.

During most of this period the country appeared outwardly as sound as ever and at times seemed to have recovered much of its old splendor—notably, in the reign of Ramesses III of the XXth Dynasty and during the brilliant, if fleeting, revival fostered by the Saïte kings of the XXVIth Dynasty.

Actually, however, Egypt was on its last legs: priest-ridden, economically unsound, sapped of its native vitality by centuries of luxury and self-indulgence, overrun by foreigners, and depending for its defense on an army composed almost entirely of mercenary troops.

In its weakened condition it was an easy mark for the new and powerful neighboring states, with which it now found itself surrounded; and the story of the end of dynastic Egypt is one of a long succession of foreign rulers, interrupted at intervals by the short-lived and, for the most part, local governments set up by petty, native dynasts.



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Painting by H. M. Herget

"His Majesty Gave Stipulations for Building a Very Great Pylon, in Order to Brighten Thebes"

The never finished outermost pylon of the temple of Amun at El Karnak, started in the 21st year of Sheshonq I of the XXIInd Dynasty (924 B.C.), is under construction. Up the temporary ramps on either side Palestinian and Nubian captives are hauling sledge loads of sandstone blocks, brought from the quarry by the stone barges (right foreground). To the right of the rear portion of the temple is the sacred lake; to the left, the enclosure of the temple of the war-god Montu. Mid-distant on the right appears the temple of Amun's son, Khonsu, behind which the pylons and avenue of sphinxes lead to the temple of the goddess Mut, Amun's wife.